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ABSTRACT

This publication describes infant and toddler programs in which young children and their parents are seen as trustworthy, competent people able to make decisions and solve problems. In Chapter 1, aspects of the Pacific Oaks Infant-Toddler-Parent Program are described, infant-toddler safety rules are listed, and guidelines for parent observation and participation are suggested. In Chapter 2, the challenge of creating growth-producing environments for infants and toddlers is discussed. Chapter 3, focuses on planning day care space for infants and toddlers, with special empahsis on promoting the child's development from trust to autonomy. Chapter 4 contains a description of the model of infant care developed at Loczy, a 24-hour care setting for infants and toddlers in Hungary. The history and philosophy of the Loczy program and the training and research components of the program are discussed. In Chapter 5, concrete examples of the application of the Loczy philosophy are presented from both the caretaker's and infant's perspective. Ten principles for a synchronous relationship between a caregiver and a young child are also presented. In Chapter 6, vignettes of infant play in a campus child care center are presented. Chapter 7 contains a report of a study of toddler social behavior at Pacific Oaks in which both anecdotal notes and behavioral coding were used as mesurement techniques. Findings of the study are presented in both narrative and quantitative form. (JMB)

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SUPPORTING THE GROWTH OF INFANTS, TODDLERS AND PARENTS

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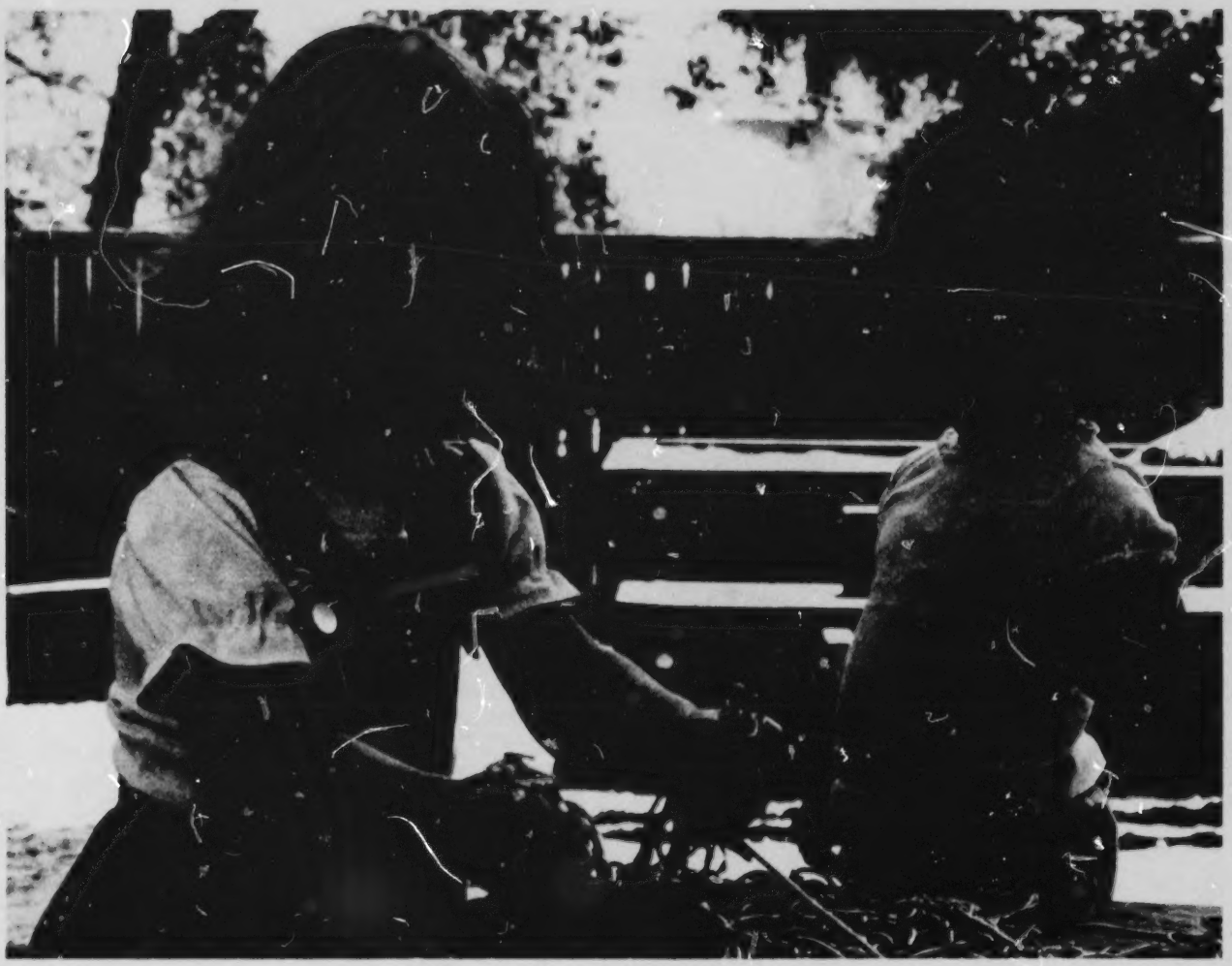

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INTRODUCTION

Elizabeth Jones and Molly Noxon

Children's programs at Pacific Oaks began with three- to five-year-olds, and for many years nursery school and kindergarten remained our particular interest. More recently, we have expanded our work with children to include both younger and older children--the entire early childhood range.

A recent Pacific Oaks publication, Joys and Risks in Teaching Young Children, describes some of the things we have learned from our three- to nine-year-olds. Here we turn to the babies--those incredible growers and learners--and what they are teaching us about their growth needs and our own.

There is currently a great deal of interest in the growth and development of infants and toddlers. Babies are being studied in universities from coast to coast. There is agreement that infants are amazingly competent organisms, capable of learning and reacting at a very early age and at a rate hitherto unthought of. On the basis of his Harvard research, Burton White has speculated that children acquire the basics of their lifelong intellectual and social skills in the period between eight and thirty-six months of age.

If these months are so important, then how do we further infant development? One way is to train parents to teach their babies. In some programs, mothers are taught songs, stories, and activities to do at home which presumably encourage children's cognitive development. Babies barely able to stand are shepherded into circles where their enthusiastic mothers sing songs identifying parts of the body, number concepts, and letters. This is a seductive idea. It looks familiarly like "school," and anxious parents can begin to prepare their infants for achievement in kindergarten and first grade. Children under two can be taught, with a lot of adult help, to sit in circles, obey the teacher, and move from one adult-structured activity to another.

But is this a reasonable way to encourage infant learning? A sizable body of knowledge tells us that pre-verbal children are learning only a little through the use of language. They are learning most with their bodies and their senses. Piaget, who postulates that children learn initially through bodily experiences, calls the first stage of cognition the sensory-motor stage. If we accept his thesis, then organized songs and stories seem an inefficient way to reach the infant. But what other options do we have?

The academic attention being focused on infancy is being reflected in the growth of programs designed for infants and parents and in the increase of group day care for children under two. Home-based intervention programs have been aimed at teaching skills to parents of children potentially "disadvantaged" or "at risk." Infant-parent classes, often called "parent observation" classes, are increasingly available through colleges and adult schools. Such programs vary widely in quality. Most are relatively rigid in structure and are centered around the teacher as the source of information. Private and cooperative nursery schools are beginning to offer infant-toddler groups. Many of these are designed by people who are most familiar and comfortable with the older preschool child. Such programs tend to be miniature preschools, whose ultimate goal is to prepare babies for "real school."

Until recently, public policy in this country discouraged group day care for infants and toddlers. The youngest children were seen as needing the simplicity and close relationship with a parent which home provides; if a mother had to work, in-home care or family day care was the only approved alternative. Now, however, group care for infants and toddlers is spreading. Its growth raises many questions about interpersonal relationships in the earliest years and the design of programs to ensure optimal development.

The contributors to this book have experience working with infants, toddlers, and parents, both in parent-child groups and in day care. While their experiences vary, they share a conception of young children as active learners and would agree with Bruner's

> *...emphasis on self-initiated, intentional behavior. Surely the chief practical recommendation one would have to make...is that the infant should be encouraged to venture, rewarded for venturing his own acts, and sustained against distraction or premature interferences in carrying them out. It is a point of view very alien from such ideas as preventing "deprivation" or providing enrichment, both of which are highly passive conceptions...* (p. 8)*

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*Bruner, J.S. "Organization of Early Skilled Action." Child Development, 44:1-111, 1973.

This point of view is supported by the developmental theories of Erik Erikson, with his emphasis on the development first of trust, then of autonomy, in the first two years of life, and Jean Piaget, who has described the implications of the growth of object permanence (understanding that things and people which are out of sight still exist) for early separation experiences and has emphasized the sensory-motor experiential base for the growth of cognitive structures in the young child. Growing children are self-motivated learners, and learning is the outcome of action and interaction.

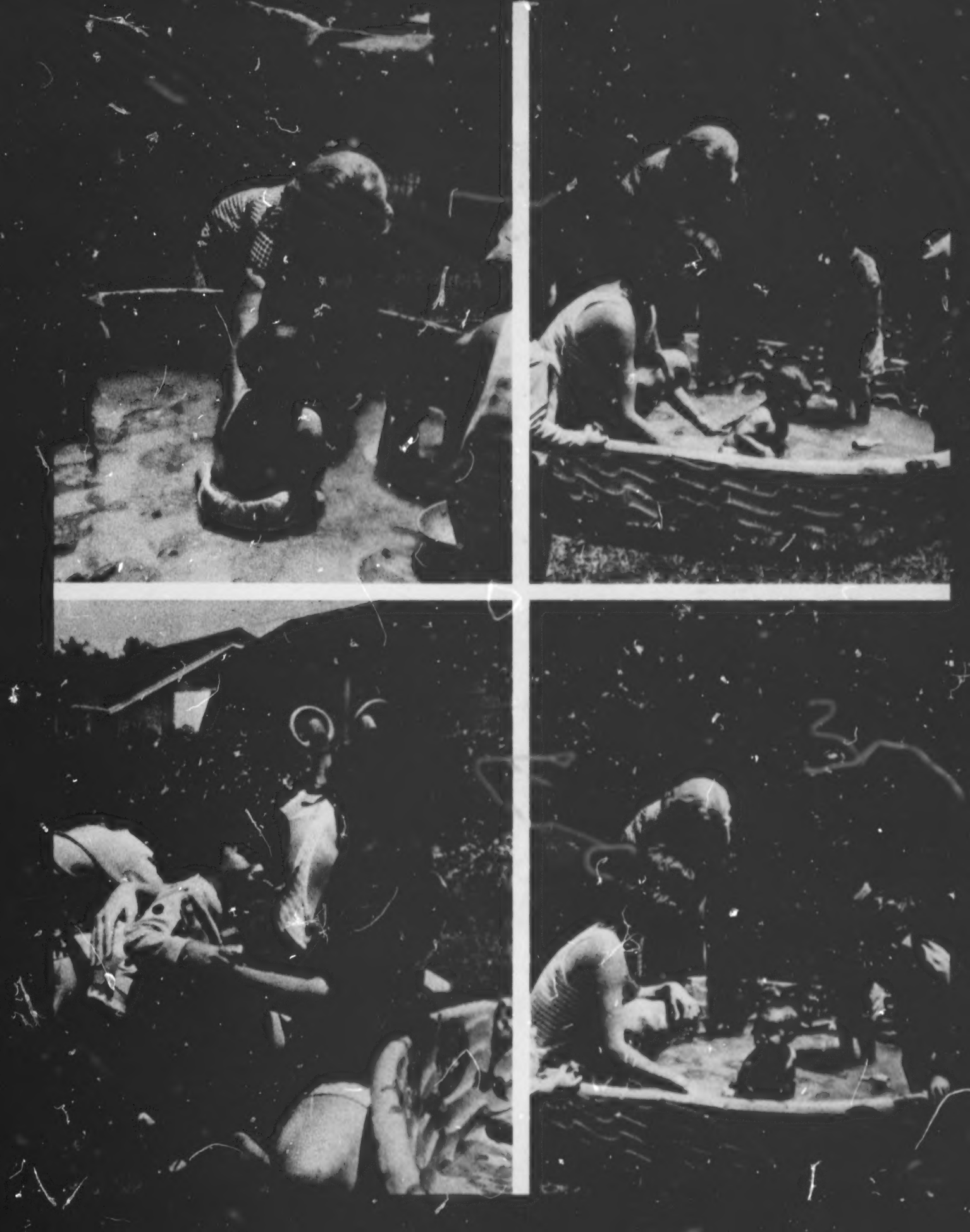
In the programs described here, both young children and their parents are seen as trustworthy--competent people able to make decisions and solve problems. They are encouraged to behave in these ways by carefully designed physical space and supportive relationships. In each program the participants, big and little, are continually learning together--trying things, observing outcomes, and building safe space and support networks in which risk-taking can occur.

Careful observation is the key: What is happening for this child at this time? Is the environment appropriate to support his/her continuing growth? Can we manipulate environments rather than manipulating people, giving big and little people as many opportunities as possible to make their own choices within supportive environments?

The Pacific Oaks Infant-Toddler-Parent program serves as our starting point in this book. Molly Noxon, the program's current director-teacher, and Jerry Ferguson, its founder, describe what happens there and why. This is a part-day program in which parents remain on the site, though not continuously with their children. Increasing numbers of such parent-child programs are springing up, sponsored by colleges, adult education, nursery schools, churches, and community agencies. We think our experience may be directly related to theirs, especially as we grapple with the question of respect for parents as knowledgeable competent child-rearers.

Some of our insights have come from infant day care, another rapidly growing phenomenon in many communities and one much in need of guidelines. Betty Dimond shares insights developed in the process of designing an infant center, looking at physical space in detail. Magda Gerber describes a conception of a quality adult-child relationship developed in a twenty-four-hour care setting for infants and toddlers in Hungary. Janet Gonzales-Mena, who interned in Magda Gerber's Demonstration Infant Program, offers concrete examples of the application of this philosophy in an infant-toddler-parent program and its potential for parent-child relationships at home.

Always, we learn from babies. Much of this learning happens in our intensive interactions, especially when we are able to let the child take the initiative. Mary Jane Tonge shares vignettes from her participant observation as a teacher of the very young in a campus child care center. Nancy Jambor describes her efforts to look at toddler behavior with objectivity while continuing to convey her excitement in it.



A PARENT-CHILD PROGRAM

Molly Noxon

The Pacific Oaks Infant Toddler Parent Center has some elements of a preschool, some of a neighborhood play group, some of a college classroom, some of an infant care center. It exists as part of a college community deeply invested in the study of young children and their families, and increasingly in other human services as well. Because we are part of a small specialized humanistic college and children's school, we recognize that we have unusual resources and that we appeal to a special group of parents. Typically middle-class and well-educated, they are the book-buyers, the magazine subscribers--the most vulnerable to the child-raising information overload. With them, we have developed a program which has a number of elements which may be useful to others interested in the nurturance of healthy families and babies.

Program Organization

Children in the Infant Toddler Parent program range in age from birth to twenty-four months. We operate four days a week, with one group on Monday and Wednesday mornings, and one on Tuesday and Thursday mornings, from 9:30 to 11:30.

Seventeen families are enrolled in each two-day group at the beginning of each semester. The full age range of children is represented in each group. For some children in the beginning stages of autonomy, self-initiated social interactions are becoming more apparent and significant. These children are increasing their ability to act upon their environment; they may be crawling or toddling. Other children, who are in the later stages of autonomy, may be increasing their ability to explore the environment and take an active part in their own learning. They are adding to autonomy the qualities of undertaking or "planning" a task and completing it.

Flexibility in grouping is built into the program so that siblings, neighbors, or close friends may participate on the same days if parents prefer to do so. The program is directed by a head teacher, myself, and staffed by teaching fellows, graduate and undergraduate students, and parents.

The program has these objectives:

1. To provide a rich educational environment for college students in direct contact with infants, toddlers, and parents.
2. To design equipment and environments which are developmentally challenging to very young children.
3. To provide a program for parents in which they can:
   a. Share problems, solutions, information, and techniques.
   b. Find nurturing support and make friends.
   c. Be physically separate from their children and yet have immediate access to them in case of need.
   d. See their children interacting with people and an environment which fosters development.
   e. Have a facility in which to initiate individual or group programs of special interest.
   f. Enjoy themselves.
4. To provide a program for young children in which they can:
   a. Explore an environment which enhances growth.
   b. Interact with other children and caring adults.
   c. Experience brief separations from their parents.
5. To demonstrate an open-structure program which meets the needs of very young children and their parents.
6. To provide opportunities to experiment with and institute change.

Because we are constantly changing, learning from each other, and exploring new questions, it is difficult to describe a typical day. Generally, our days look something like this:

9:00 - 9:30 Staff sets up yard and organizes for day's activities.

9:30 - 10:00 Parents and children arrive. This is a time for parents and staff to discuss mutual concerns, to talk socially, and to observe the children at play. It is a transition time between the arrival of parents and children at the Center and the separation when parents leave to attend their meeting.

We expect that parents, with staff support, will learn to deal positively with separation by explaining to their children that they are leaving the yard, and that they will return. By saying goodbye, each parent makes this process observable, so that both she and the child can deal with it openly, with support if needed. It can be a difficult time for parent and child. We encourage parents to make the actual moment of departure as brief as possible, as we find this to be less stressful for everyone.

Parents remain on campus during the time they and their children are participating in the program. We feel it is important for the parents to experience the program and act as resources for each other. We also feel it is sometimes important for very young children to have immediate access to their parents in case of distress.

10:00 - 11:30 Students care for the children, together with parents who stay in the group on a rotating basis. Activities may include play with water, sand, mud, shaving cream, sleeping, eating, playing with each other and with adults, climbing, running, exploring, and walks outside the yard.

The parent group meets in a loosely structured problem-solving forum to exchange information and discuss the development of their children. I facilitate one meeting a week for each parent group; on the other two days, I stay with the students and children. On the days I stay in the yard, parents, with some students, plan their own meeting time. They may do art or craft projects, use the college library or other resources. Recently, students and parents have been offering topic-centered discussions, on such topics as children's fears, non-sexist children's literature, and choosing preschools.

11:30 - 12:00 Parents return to the yard. Parents and staff talk about the children and the day's activities. The yard is cleaned up. Children and parents leave.

12:00 - 1:00 Staff meeting.

The Physical Environment

Our space reflects our basic belief that children must be free to risk and grow and learn at their own pace. The youngest child can experience the joy of mastery. There is a multitude of levels and textures--wood, concrete, brick, grass, and sand, as well as the more usual linoleum, carpeting, and pillows. In developing the space, we have tried to use natural materials that are ecologically sound, some available at little or no cost. We also try to recycle materials or build our own equipment, rather than buy everything new. Babies are given clay and water, musical instruments, food, dough, and paint--things to smell and taste, as well as toys to manipulate.

Babies need no encouragement to explore. What we offer them is a place full of enticements. Running water, sand and dirt, ramps and steps are all available to the children. Some of our visitors are appalled at the possibilities for messiness and tumbles which the children are exposed to. A close look shows that a system of natural barriers keeps children safely within their own developmental boundaries.

The youngest infants are carried, lie on foam mats or baskets, or rest in a suspended canvas cradle or a more conventional wooden cradle, both hung with responsive mobiles. Crawling babies explore wooden deck and soft grass, cushions and mats, and a variety of toys, both commercial and homemade. Early walkers pull up on a series of low walls and railings and venture into rough grass and sand. Children who walk well find a system of textured pathways which encourage yard-wide exploration, encountering rocking boats, horses, and a variety of vehicles. There is a suspension bridge, a wide slide, and a range of climbing and crawling spaces. In this environment each child can explore and experience at his own pace with a minimum of intervention and direction from adults. Such freedom is unusual for children this age, bound as they are to the constraints of living in an urban world, held in by car seats, high chairs, and cribs--the necessary restrictions of living in a modern family.

College Students

Pacific Oaks College students are an important part of the program. They staff the yard--planning special activities for toddlers, maintaining and developing the environment, designing and building equipment, sharing resources and ideas with parents. Their enthusiasm and energy helps to keep the program vibrant and growing.

Preparing people to work with babies is an important aspect of our program. We encourage students to find their own style, to explore their own feelings about being with infants and toddlers. We are neither babysitters nor teachers of infants; we call ourselves "caregivers" for the children. We do indeed care for them--in a

physical sense, we hold, feed, change, and cuddle them. We also care for them by observing them, allowing them space and freedom to take physical risks, to handle many of their own disputes, to cry and to laugh, to experience their own feelings as real and valid. I try to instill caregivers not only with a sense of responsibility for the children's safety, but also with a sense of wonder at their remarkable capabilities and uniqueness. I encourage students to look hard at their preconceptions about babies--to reevaluate their ideas about what infants and toddlers can do. It isn't easy to watch a ten-month-old crawl down a series of low stairs without wanting to "protect" her; many adults have a strong urge to swoop in on very young children. I encourage students (and, by example, parents) to be watchful, respectful observers of the very young child's innate drive to learn, grow, and do.

Parents

The daily group meetings give parents an opportunity to share their child-raising joys and concerns and find friendship and support from one another. In a non-competitive atmosphere they compare their lives, their pleasures and tribulations, and share problem-solving skills. Here perhaps the most valuable learning of all takes place. As parents recognize the universality of their experience, they can also recognize one another's uniqueness. They are seeking solutions to similar dilemmas.

In other generations families provided extended networks of people skilled at raising babies. Grandparents, aunts and uncles, older brothers and sisters helped care for infants and transmit commonly held cultural values and skills to them. In some parts of this country today, families, neighborhoods, churches, and clubs continue to provide friendship and support for young parents.

Increasingly, however, parents find themselves isolated from one another. Eager to raise competent successful children, they look to child-rearing "experts"--that proliferating breed of psychologists, pediatricians, and social scientists who will offer them research data, formulae, and recipes. "How to parent" books abound. Advice is everywhere--from Teach Your Baby to Don't Push Your Preschooler. How can parents find, in this mass of information and advice, that which will be meaningful and useful to them?

I see one of the most important needs of parents with very small children as support--support for their own values and beliefs as well as a recognition of the value of their role. Many parents need contact with other people who take child-rearing seriously and who have a wide variety of problem-solving styles and abilities.

I am greatly concerned that parents find a supportive environment in which they can change the things they want to change, and accept the fact that there are many things in their personalities and parenting styles which they don't want or need to change. Parents are the only true experts at raising their own children; they may need to have their own expertise and styles valued and validated. Babies are unable to grow in isolation. They can be looked at only in interpersonal contexts. Each family has its own rich history, value systems, and environment--cultural, social, historical, political. Any rule about "This is the best way to raise children" has exceptions. The phenomenon of exceptionally successful children who survive family situations which seem rejecting or abusive has raised our awareness that there is no one way; healthy people grow up all over the world in spite of, or perhaps because of, adversity and confusion.

All parents are sometimes confused. We need to accept, recognize, and value individual differences, rather than make rules or set impossible standards for successful parenting. As child development specialists, we should be aware of a wide variety of alternatives in child-rearing. I see my job as a parent educator as being a resource for alternatives and options for parents who want to explore new ways. This in no way means, of course, that I am value-free. The program which I direct has an underlying structure which values risk-taking, respect for babies, and freedom of exploration. The options I present generally fall within the context of my own value systems; but I find that as I grow and change, my repertoire of "acceptable" alternatives expands and changes too.

A primary goal of our program is to enable parents to develop a mutually supportive network, in which emotional and practical help (news of community resources, baby-sitting co-ops, parties, and carpools) is frequently shared. The process of helping to establish this kind of network is time-consuming and disorderly. We are continually taking in new group participants who, while learning from more experienced members, must also find their own style and space in the program.

We try to keep the parent group meetings relaxed in pace and structure. Typically, a parent begins by asking the group for help in understanding some immediate concern--sleepless nights, toilet training, pros and cons of pacifiers. I participate as a group member, sharing my own experiences as parent and person as openly as I hope others will do. I also take some responsibility for guiding the discussion, making spaces for less aggressive members to talk, and opening and closing the meeting. Because I have

more experience with very young children than many of the parents, and because I have read a lot of theoretical material, I sometimes have insights and information which I can share. The parent group belongs to the parents and they generally do a superb job of answering one another's questions and suggesting a range of options. Our discussions are open to freewheeling-dealing with everything from sexual frustrations to thumb-sucking. We examine how we were parented as we look at how we are parenting, and sometimes touch on subjects so sensitive that tears flow. These emotion-laden sessions are cathartic--and exhausting. We find that we want to have a series of relatively "frivolous" meetings after one of these sessions.

This is not a therapy group. I find Neubauer's (1952) distinction between therapy and education helpful:

> (Therapy) *aims to effect change in individual pathology. Making use of a specific technique consciously applied, it approaches conflicts in order to free the energies bound within them, thus making these energies available for healthy growth.*
>
> *Education is aimed at those faculties of the ego which are undisturbed by conflict. It is oriented toward the healthy factors of the personality and appeals to the ability to judge, to learn by experience, to gain understanding, to plan, to make choices, to adapt to changing circumstances.*

What I do, what I encourage, is education. I don't want to cure people; I want to help them get in touch with their wellness--and with their expertise, their own knowledge based on experience. One of the reasons I share so much personal stuff with parents is that I want to be sure they don't idealize me or see me as a "super-mother." I keep somewhat self-protective space between parents and myself, and I have developed only a few ongoing friendships with individuals. Part of this is because I am no longer in the same developmental stage; my children are older, and I am older. Part of it is that parents with very small children are often experiencing serious stress, and I have learned that my participating in their pain is growthful neither for them nor for me. I deeply care that my relationship with parents demonstrate my belief that they are competent, problem-solving adults. (For those who need more support, I try to help in finding therapeutic situations in which they can deal with their unmet needs.) I doubt that a dependency relationship with me as "teacher/mother/expert," a role into which some parent educators fall, would be, in the long run, a good learning situation. My assumption of normalcy and health in the family, I am convinced, helps them to see themselves as normal and healthy.

Clarifying Assumptions

Parents must observe the program with their child for a whole morning before they apply. Parents' very real concerns about dirt and messiness can be addressed then. Parents who cannot tolerate the kinds of activities we offer usually don't return. We thus screen out a number of people right at the start.

There is only one inflexible program policy. It is the separation rule: "You must say goodbye." I feel strongly that children who are in the process of establishing trust with their parents deserve honest messages from adults. Very young children may or may not be able to understand words, but they certainly understand body messages and tones of voice. Parents who have a hard time leaving their kids ("Is this really a safe place?" "Will she really be O.K. without me?") give these messages to their children. It is sometimes easier to sneak away from a happily playing child than it is to deal with these conflicting feelings. I ask parents to say goodbye (with the help of an experienced staff member if it's difficult) in order to help both the parent and the child deal with the reality of their separation.

Only once have I worked with a parent who flatly refused. She chose to stay with her child for several weeks rather than make him cry by telling him she would leave. Finally, frustrated by her desire to go to the parent meeting and angry at my dogmatic refusal to let her leave without acknowledging it, she shouted at her child, "I'm going to the meeting and I'm telling you because Molly won't let me go until I say goodbye. Goodbye!" That certainly did make him cry, though fortunately not inconsolably. In the parent meeting we talked about her anxiety and confusion. Other parents tried to help her understand the policy. We talked about Basic Trust. We talked about Object Permanence. Nothing helped. Finally, one parent remembered something a preschool teacher had told her. "Look," she said, "when you leave your child only when he's busy and involved, could you be teaching him not to get involved or you'll leave?" To this mother, who had been a teacher, this made perfect sense, and she cheerfully told her son goodbye from then on.

Seldom is separation anxiety this clear-cut and easily solved. Typically, the parent who has a hard time leaving gives long and complicated messages to her child.

She gives a great deal of information ("I'm only going upstairs, and I'll be with so-and-so's mother, and I'll be back at 11:30 exactly, and...") or asks permission ("I'm leaving now, O.K.?").

I, or an experienced staff person, work individually with parents to help them deal with their anxiety. Sometimes I say directly, "You said goodbye to Eric. I think you'd better leave now," if my relationship with the parent is trusting and friendly. I follow up at the end of the morning or in the parent group with a question, "Did you understand why I asked you to leave? Was it O.K.?" which usually elicits some good discussion. As parents learn that our environment really is safe, and that staff members really do call parents out of meetings when children are inconsolable, they generally relax and are able to give clear, straightforward messages to the children.

And what of the staff person who is left with the crying child? Somewhere along the way I learned an amazing (for me) truth: Babies cry and sometimes that's O.K. Knowing this simple rule was revolutionary to my teaching. (Sadly, I learned it too late to revolutionize my parenting--or maybe crying babies are never O.K. with their mothers?)

I teach students, usually by modeling and then discussing my experience in staff meeting, to deal with a child in distress by staying near him, usually holding him (though some kids prefer proximity to restraint). I generally use very few words. I tell the child what I observe. "Your mom said goodbye and left, and now you are crying very hard." This often has a magical effect. The child hears recognition of the event and is able to move on. If he continues to cry, I continue to validate what I think is happening. "I see you crying. Your mom left and you seem very sad (or angry). It's O.K. to cry when you're sad (or angry)." This often serves to escalate the noise production; kids like to hear that what they're doing is O.K.! Finally, I begin to suggest alternatives (only after about ten minutes, or the limit of my endurance, whichever comes first.) "When you feel better you can paint with Janet...help fix snack...go on a walk..." Usually the child is really tired of suffering and is ready to choose an alternative. Occasionally, a child is truly involved in his distress and wants to stay with it. If I am feeling O.K.--rested, together, adult--and if I have known the child and his parent for some time, and if I know his parent will understand, then I may decide just to be with the child while he howls. Occasionally I will remind him that he can choose to do something else. This can be hard to do and takes a lot of energy. On days when no adult in the yard is able to cope with a distressed child, or when a child is new to the program, we have the option of asking the parent to return.

Working in this program, I realize how fortunate I am to have both an unusually thoughtful group of parents and an enthusiastic group of students to model what I consider to be appropriate behavior in an infant-toddler environment. In orientation, seminars, and especially in daily staff meetings, we continue to examine the program, the rules, and how we function as professional infant people. This core of intelligent caregivers, I realize, gives our program a very special flavor, and allows us to run a program in which printed schedules and rules are relatively unnecessary.

Working in other settings with parents and toddlers, I have found myself more inclined to offer a written list of "rules" (which I've listed at the end of this chapter) to give parents something concrete to hold onto. Interestingly, although I get a good deal of lip-service respect as "teacher" in such settings, only one of eighteen parents in a class attempted to follow the guide. The rest continued to talk over children's heads, sneak out while their children played, and direct the reluctant little ones into activities.

My approach at Pacific Oaks is probably only truly comfortable for me because, generally, I am dealing with people of my own culture. In this group, we can make some assumptions, e.g., mostly we don't approve of spanking (although almost all of us do or have done it), and most mothers-in-law want us to toilet train kids too early. In other groups, I try to figure out what the prevailing mores are and validate them--though this is, of course, much harder. I think if I were in a group where everybody but me felt that spanking was essential, I would be argumentative, lonely, and not want to stay long. But I would be the one left out, not the parents. They would be right, for themselves and their families.

What We Are Learning

As students of human development, we are beginning to recognize that some of the truths we accepted about children under three are fallacious. We see evidence of truly cooperative play and empathy among toddlers. We see very young babies appearing to take pleasure from one another's presence, and engaging in interactive "games." We are unsure of the long-range effect of these early peer group social interactions, but we experience daily the pleasure of being with children who are developing a sense of themselves as social beings.

We notice that short, well-realized separations benefit both parents and infants, and that children exposed to a variety of caring adults are learning valuable lessons in trust. We are cognizant of the importance of attachment bonds in infancy, and we are exploring both cross-cultural and alternative family styles--shared parenting, communal families, and single parenting--as realistic and valuable options for raising infants and toddlers. We are excited by the increasing participation of men in the program.

The combination of a thoughtfully designed physical environment, a program developed by students, parents, and faculty as optimally growthful for infants and toddlers, and our constant exposure to small people thrusting through the most rapid physical and intellectual growth in their lives, makes ours a program which is exciting, fluid, and dramatic. These are not often words applied to parent education programs.

As we pay increasing attention to infants and toddlers, as we recognize the capabilities of very young children, it seems increasingly important to me that we further explore alternative ways to help their parents develop the full range of their skills and options. Infants need, above all, reasonably self-assured parents. I am suggesting that a parent education model in which a child development professional functions as teacher in a traditional style may have only limited usefulness in fostering parental self-esteem. As an alternative, I am proposing a peer-education model in which the child development professional functions as facilitator rather than expert. Where there is an atmosphere of genuine respect, parents can learn and grow and be affirmed in their competence.

University Extension Class: Toddlers and Their Parents*

SUGGESTIONS FOR PARENT OBSERVATION AND PARTICIPATION

Our objective is to provide a time and space for children to explore and play at their own rate and by their own choice. As adults, we try to respect children as unique individuals. So relax...and enjoy!

1. Many activities that toddlers enjoy and learn from are wet or messy. Come in washable clothes, and bring a change for your child. (Some tempera pigments are hard to wash out. Some commercial pre-soaks help, as does reserving a set of clothes just for "school.")

2. As you and your child become comfortable, distance yourself and become an observer. Place yourself so that you can see your child and he can see you. He will probably want to check in with you occasionally. If you leave the play area, tell your child where you are going and how long you plan to be gone. Children this age frequently exhibit some distress at separation. Juanita or Molly or another parent can help you and your child work on this process. Children who want to sit with their parents are welcome in the "meeting" space. All the active play will be outside.

3. Toddlers usually solve for themselves the inevitable disputes that arise when they are together. When adult help is called for, in case of imminent danger, redirection for each child is the method of choice. Avoid just plain "No," and try to give positive directions. Not "No, don't grab Joey's bear," but "I see that you want to play with Joey's bear. Let's find another toy for you." Not "No, don't push!" but "There are too many people on the slide. I'll help you go one at a time." "No" is a powerful word and can be saved for emergencies.

4. Sit or kneel when you are with children in their activities. Be at their level. Imagine a world populated by powerful giants. Try to talk to someone's knee!

5. Try to let your child use the environment and activities with a minimum of direction. Do not expect your toddler to make equal use of all activities and materials, but allow her to choose how she wishes to participate.

6. Help children keep material for an activity in the designated place, e.g., playdough on the table, sponges at water play, etc. Be sure that you, as an adult, observe this also. Much of the job of being in a toddler environment is picking up, returning

*I used this observation guide and the safety rules which follow in a university extension class I taught for toddlers and their parents.

things to a usable space. Setting up and maintaining a safe and reasonably orderly environment is one of our major tasks and challenges!

INFANT-TODDLER SAFETY RULES

Get to know each child's physical skills, and be aware that they change daily!

Don't lift a child onto any equipment or surface he can't climb onto by himself.

A child may need assistance in climbing up or down stairs, but should not be lifted onto stairs.

If a child falls or trips and you can see that it's not serious, don't overreact. Don't give strokes for falling.

If a child falls heavily, your first inclination will be to pick her up. DON'T!!! Wait and see how she behaves. If she is seriously hurt, she will lie still without attempting to get up; her cry will let you know she's hurt. Don't move her! Get help!

Don't pick up a child by his arms. It may dislocate his shoulder.

Keep the yard safe by:

1. Doing a yard sweep each morning.
2. Not bringing styrofoam cups into the Center, and reminding other adults not to do so.
3. Keeping the gates closed.

Keep electrical outlets covered.

Don't bring large plastic bags into the Center.

NEVER give small children these foods: popcorn, nuts, raw carrots.

If a child begins to CHOKE:

1. Sweep out his mouth with your finger.
2. If he's coughing, let him cough out the object.
3. If he's not breathing, turn him over your knees with his head pointing down. Hit him hard between the shoulder blades with the heel of your hand.

FIRST AID:

If it's a scratch, wash it and put a bandaid on it. Be sure to tell the parent.

If it's a serious cut or injury, use the First Aid Kit in the office. Fill out an accident report. Send for the parent.

GERMS:

Wash hands with Phisohex after changing diapers. Put a paper under child when changing diaper on changing table. Do not change diapers on a day when you serve the snack.

Use a little bleach in rinse water for cups.

If a child seems ill, tell the parent.

Reference

Neubauer, Peter B. The Technique of Parent Group Education: Some Basic Concepts. New York: Child Study Association of America, 1952.

CREATING GROWTH-PRODUCING ENVIRONMENTS FOR INFANTS AND TODDLERS

Jerry Ferguson

At Pacific Oaks we approach teaching and learning as a process of shared inquiry, whether our students are eight months, eight years, twenty-eight, or fifty-eight (and we do have students of all those ages). What we try to do is to create growth-producing environments and then immerse ourselves in them, to study them, modify them, and grow with them. The Infant-Toddler-Parent program had just such a history. As it moved through four physical locations--Pacific Oaks' California Boulevard campus, rented space in the community, back to California Boulevard, and finally to our new campus on Westmoreland Place--we were faced with repeated environmental design challenges. In the process of coping with each, we have developed some useful design principles for infant-toddler programs.

When we began the Infant-Toddler-Parent program, I was a pregnant faculty member. Jason became one of the program's early participants. Along the way I enrolled in architecture school, and by the time we moved to the Westmoreland campus I was not only a child development specialist but an architect as well, responsible for the renovation design of the whole campus, as well as of the infant-toddler space. This chapter describes some of the things I have learned about designing spaces for infants and toddlers.

Wide Age Range

From the beginning, we wanted to have a wide age range of children; and zero to two-and-a-half is definitely a wide age range. During this time period children go all the way from complete helplessness to autonomy and assertiveness without any moral responsibility. With this combination, there is real physical danger for infants in a program with toddlers, if the environment is not planned in a thoughtful way. When you have an infant of three months lying on his back watching tree patterns together with a two-and-a-half-year-old who is learning to pour sand, it can be a disastrous combination.

Nevertheless, parents and staff both felt strongly that it was important to have the wide age range. Many of the families had two children in this range and wanted both of them there at the same time; they didn't want to leave one child home with a babysitter while they brought the other one to our program. Besides, it's fun for infants to be able to watch people moving through space, to watch things happening, and other children are a natural for them to watch and relate to. Little people just seem to recognize and be delighted by other little people. They move, and they make noise, and they shake things and yell and jump up and down and poke each other; there's a lot of delightful activity going on. A lot of the parents of the older children also wanted their children to be around babies, because they were expecting babies themselves. If you're a small child, the shock of having a new sibling move in with you is probably lessened if you're already a bit aware that there are such things in the world, with different needs that must be met.

One sees a different philosophy in other centers. Some programs for infants and toddlers separate all the immobile children--all the non-crawlers, or sometimes even the non-walkers--into one place. That procedure can put a strain on a parent whose child happens to be one of those big, slow-moving babies who doesn't really get on with it until he's fifteen or eighteen months old. The mother may become sure there's something basically wrong with the child, and you can see the whole self-fulfilling prophecy begin to work. At the other extreme, there is the little scrawny, wiry child who is walking at eight months, and who, because she can walk, is put into a group with a lot of one-and-a-half- to two-year-old children. Physically she's smaller and cognitively she's not as well developed, and these differences can cause real problems. One problem with this approach is that it makes it easy for the adults to have a kind of mind-set that these are all walkers, they're autonomous and into doing their own thing; and so the adults don't make allowance for the wide age range and the range of abilities.

If you know you have a wide age range, you are also less likely to compare my eight-month-old with your eight-month-old, and my sixteen-month-old with your sixteen-month-old. You realize, by seeing the whole continuum, that children have their own individual styles, that they follow a developmental sequence but they do it in their own time. There are faster ones and slower ones, and angry ones and calm ones, but they will all get there after awhile.

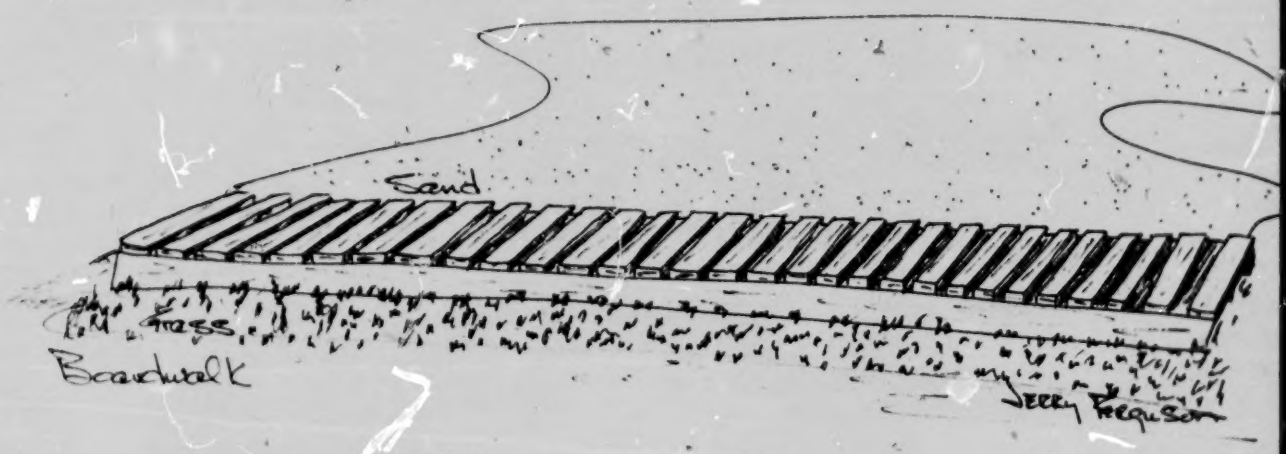
Given a wide age range, the problem then became one of how to sort children out

in terms of their own physical ability and cognitive structure. We wanted them to make their own decisions about where to be and whom to be with, rather than having adults make these decisions for them through a series of cages--play pens, fences, walls, and doors--which would severely restrict their opportunities for choice.

Natural Barriers

Outdoors we created what we felt was a safe, low-stimulation environment for the youngest children. Our primary space was a large dichondra area, because we felt that dichondra was a safe, non-allergenic surface, and if they grazed on it it wouldn't bother them.* There was also a sand area. Separating the dichondra and the sand, we built what I, with my ranching background, first called a cattle guard. A cattle guard is a series of pipes, which present an unstable surface to cattle or deer; if they step on it, they back off. However, it permits some kinds of access; cars can go across a cattle guard, but the cattle won't. On the same kind of theory, we wanted adults to have free access back and forth. Adults have to be able to get to children to help them if they're in distress, so you don't want a barrier for adults, but you want a clear barrier for the youngest children, for whom sand can be a very distressing experience.

Our cattle guard (renamed the boardwalk, because so many nice ladies were appalled at the name "cattle guard") was just a wooden walkway, built on two-by-fours set on end, with one-by-threes set perpendicularly across it. It was eighteen feet long, about eighteen inches wide, and about three inches high. So the first barrier that presented itself to a child on the dichondra was a three-inch-high step. Crawling up out of the dichondra and onto the boardwalk was the very first outward move a child would make.



What happened typically was that young children new to the experience would crawl from the dichondra up onto the boardwalk, and then they would crawl across it and put a hand in the sand. The hand would slide out from under them, and that would be a physical cue to them that the sand was an atypical or dangerous situation, because the usual reaction was to withdraw the hand and go up and down the boardwalk instead. Over time they would put a hand in again, or lie on their stomachs and put both hands in and play with the sand; sometimes they would scoot around and put a foot in. Children spent as much as two or three weeks cruising up and down the boardwalk and doing all kinds of experimentation with the sand before actually getting their whole bodies into the sand.

This kind of behavior indicates that these were children who were taking real responsibility for their own safety and making decisions about what they were physically and cognitively capable of. The result was that once a child decided to move all the

*While dichondra is an ideal surface in many respects, we have found it too hard to maintain. Seldom do you get the level of commitment to maintenance, either by staff or by the institution, that dichondra requires. As a concession to reality, our current yard has grass instead. While some grasses are sharp and abrasive, we have found a variety that is both hardy and soft. We did so by asking nursery people what would be appropriate for our area and our particular use.

way into the sand, he had researched it enough that he was O.K. in it. We never worried about a child who had crawled from the dichondra up onto the boardwalk, experimented with the sand, and finally got into the sand. We knew that child was safe.

This whole low-stimulation area was surrounded by a variety of natural barriers--things that would keep the children in the area as long as they were not very adept at crawling. We had a telephone pole lying down; we had telephone poles cut off at two- and three-foot lengths and set in vertically, with anywhere from two- to six-inch gaps between them. We had large boulders. We had small hills, two or three feet high, with a small plant at the top--a juniper that could protect itself but not be abrasive to children. We had a structure of telephone poles sticking up about four feet high with tires bolted to them; the tires extended perpendicularly from the poles. To pass this barrier, children had to climb through the tires. That's very difficult; you have to get your foot up over the tire, and straddle it, and get your foot on over to the other side; or else you have to be able to put your head through far enough that your hands can touch the ground on the other side.

The last barrier we had was a large drain tile. It was about three feet in inside diameter, and three feet long, and it was open and clear, so that at any time any child could have crawled through it. But it was in the sand, so that any child who gained access to it had to have already made the decision to get into the sand area. We found that in fact it was an effective cognitive barrier; though it looked open to us, children didn't crawl through it until they were just about ready to walk.

This safe central area, which was circular, was surrounded by the more complex environment where the older toddlers were. The barriers did sort children out. The older children could, of course, come into this area, because they could all come through the tunnel or over the barriers. But when they did, it was only for short periods of time, and it looked to us like visiting, or just kind of cruising around, rather than coming there to <u>be</u> there. There were more exciting things for them to do in their own area.

We shared the property with a parent cooperative nursery school, many of whose children had previously been in our infant-toddler program. The nursery school had a separate building and a separate yard, but the yard adjoined ours and the fence between the two was low, so that children could look across it and could exchange toys. Instead of having a gate between the two yards, we just had a pile of tires. The tires were very difficult for children under about two to get over, but older children could manage them.

This barrier gave us more evidence that having children make their own decisions about where to be worked. The first time a child from the nursery school had a sibling born, this older child popped over the tires and was part of our program for about two weeks. (He had previously been in the infant-toddler program with us, but not at this location.) His mother dropped him off in the front yard as usual, but he regularly joined us for awhile; then he again chose to stay up in the front program with his older peers.

We thought that maybe this was just a chance occurrence, until it happened again the next time a sibling was born in an older child's family. At that point we realized that children must have perceived our program as being more nurturing, more individualized--a place to be taken care of. When that was what they needed, it was available to them. These were the only children who used our program in that extended, supporting way. The preschoolers could have come over the tires at any time, but they seldom did so individually or for any great period of time. They came occasionally in groups of two or three, and they made it very clear that they were coming to visit and to take care of the babies.

It was easier to see our children making the decision to go into the preschool environment, when they were physically able to go over the tires. They would go for short periods of time, usually to engage in a specific activity that we didn't have, or to see a friend or sibling. After ten to twenty minutes, they would be back.

These time periods would gradually extend until eventually we would realize that a child was more often there than here. When that happened we would say to the parent, "It looks as if your child is really ready for the other program. What about dropping him off there when you come? When you find you're dropping him off more often there than here, then maybe you had better withdraw from this program and make arrangements for him to be there." It worked beautifully! Everyone was very comfortable with this approach, and we didn't have any problems with entering criteria (e.g., Is your child toilet trained?). We didn't have parents feeling that their children were slow if they stayed in our program until they were three, or precocious if they happened to pop over the tires early. We just trusted the children to make their own decisions, and they did.

The children in this program were able to use natural barriers as cues for appropriate behavior. It is important to remember that these children had a long history of making decisions, many of them environmentally based. They were real choices about personal safety, companions, and activities. We were not taking children who had no

experience with decision-making and expecting them to make decisions they weren't capable of making.

Environmental Cues

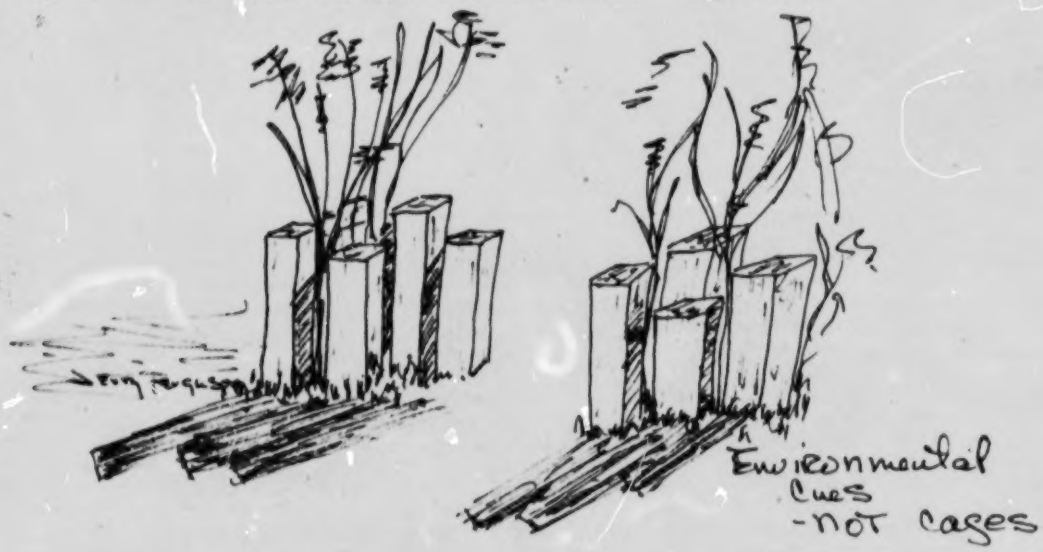
Indoors we had three major spaces, which we defined with materials and with colors. One was the quiet room. It had a lot of blue, which we felt was a calming influence. It had a lot of softness--carpeting, curtains at the windows, lots of pillows, mattresses, a rocking chair. There were books, soft toys, and a record player with a selection of lullaby-type records.

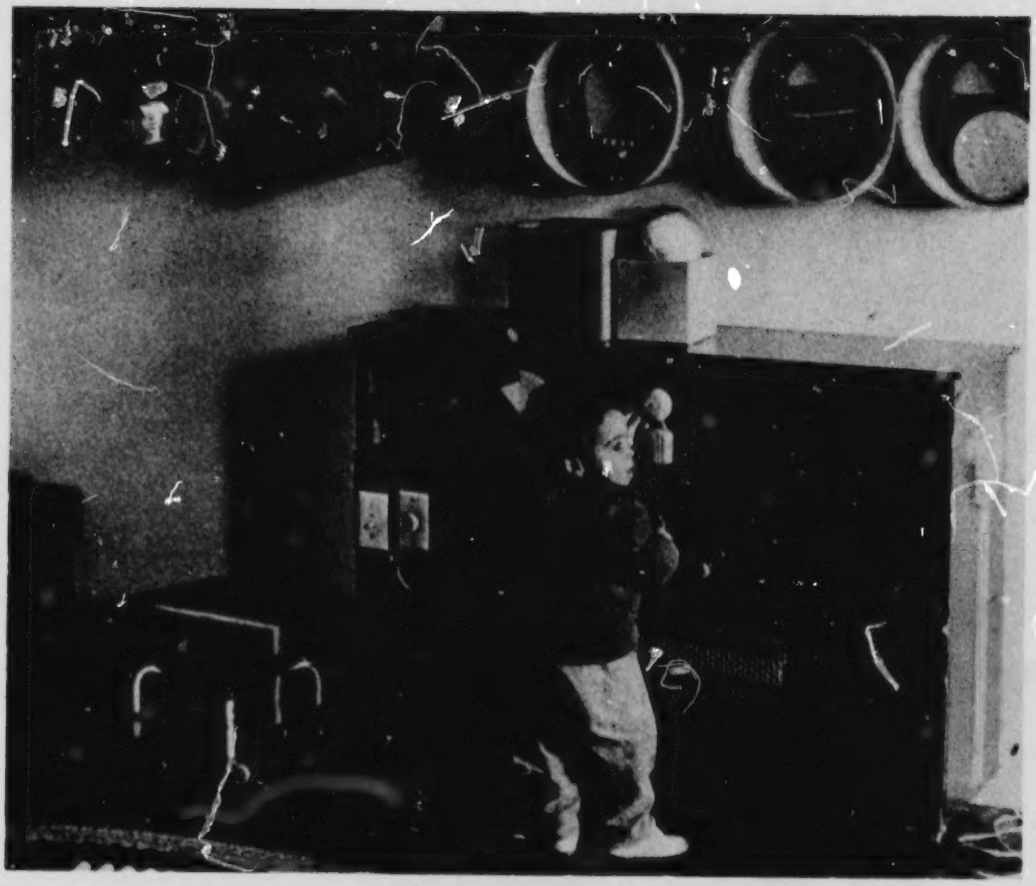
Then we had what we called the cognitive room, for exploratory learning activities. We had in there all of the age-graded manipulative toys, blocks, rattles, an electronic busy box--that whole variety of objects that children play with, experiment with, manipulate. This room was primarily yellow and orange--colors we felt would be stimulating. We were trying to help children develop a sensitivity to environmental cues as to what kinds of behavior were appropriate in different places. Even little children know that you're supposed to be quiet in church, or that if you go to grandmother's you behave differently than you do at home. Color is one such environmental cue; softness is another.

The third room was the messy room. It was divided from the cognitive room by a half-door barrier, so that adults could go in and out easily, but children couldn't go back and forth at all. Children, to go from the messy room to the cognitive room, had to go outside and around the building and in the other door. We figured that enough stuff would drop off or dry by the time they got around, that the journey would serve as a self-cleaning mechanism. We also had pots of clean water outside the door and along the path, in hope that by the time children got to the cognitive room, some of the mess would be gone. The room was a pale yellow, suggesting light and energy for active play, but not distracting or competing with what the children were doing.

The messy room had a water table with running water and a drain and three different valve systems, so that children could learn to turn water on and off themselves, using different levering techniques. Adults put out a whole variety of creative, manipulative, sensory materials at their own discretion--paint materials, shaving cream, play dough, and messing-around tasting activities, like finger painting with pudding. Children were free to choose what to do and how long to stay.

Outdoors, in another effort to offer children environmental cues, we planted flowers. Rather than put chicken wire fences or something like that around them, we put short four-by-fours into the ground, of random heights and at random distances from each other. They varied from three to twelve inches in height and from two to six inches apart. The barrier was one that children could get through physically, but we tried to help them perceive it as a protection for the flowers, a reminder. When a child approached the barrier we would talk to her about and show her the flowers. We would model not walking on the flowers and help her go around. We wanted children to develop a sense of appropriate behavior based on physical cues, rather than be confronted by an adult-imposed fence that they couldn't negotiate.





Flexibility

Space in programs for children needs to be flexible, so that the adults who are working in that space can experiment with it, and, in a limited way, the children can also. We didn't want either parents or college students thinking that this is the right way; rather we wanted to promote an experimental attitude: Let's see what will work with this child, or with this group, or with us as adults. If things work, fine; if they don't work, we'll try something different.

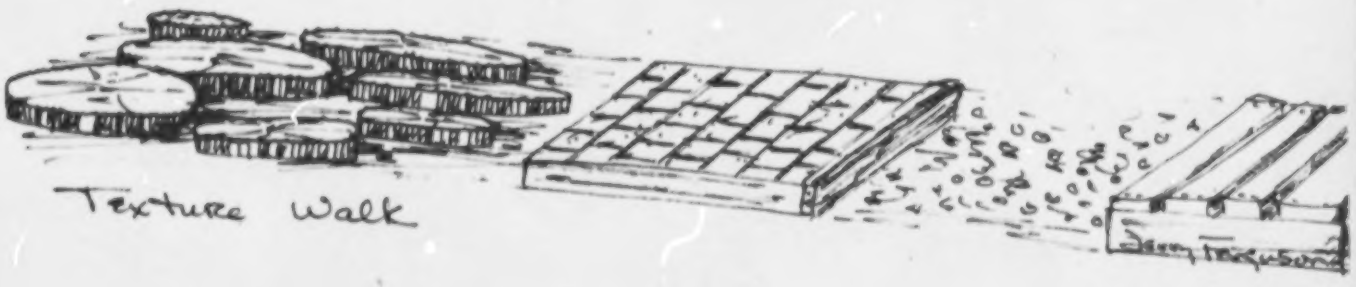
One thing we did was build a texture walk. We had a space about two feet wide and six feet long, and each of us agreed to put a texture in a part of that space which we thought would be an interesting developmental challenge to a beginning walker. We had a section of tree rounds, and a section of bricks set in sand, and then a bark surface with two long tree branches along the side to create a place. It was exciting to see that people could each provide something on their own and thereby create a continuum that was developmentally sound, flexible, and challenging for the children.

It turned out to be more than a walk. After children had done all their walking on it and it was no longer a challenge to them, they would leave it and go on to something else. Then they would discover push-toys, and they would come back to go over the whole thing with their push-toys, over all the bumpy places and little steps and so on. It was interesting to see how children at different developmental stages would recycle through the environment, coming back to use, in new ways, things that had been designed primarily for children at an earlier developmental stage.

Another idea we had was to make a mountain. Then we began playing with the idea of creating a void rather than a mountain, and so what we made was like an inverse doughnut. We left a hill of dirt by digging a circular trench, leaving the middle standing. It turned out to be an important developmental challenge. Children had a very difficult time standing on the little pedestal in the middle, even though it was the same level as the dirt outside the trench.

The trench sloped; it was about eight inches deep on one side of the circle and fourteen inches on the other side. Short-legged crawlers would get in on the shallow end, more agile children on the deep end. The crawlers would just go around the trench and then get out. But the older children would try to climb up the pedestal, on its steep side. You could see them getting on it on all fours, and then crouching and lifting their hands up, and then getting their hands a little bit higher. When a child was actually able to stand upright, it was a wonderful breakthrough. The elated look on his face conveyed the whole sense of autonomy: "I did it!"

We came in one morning after it had rained and decided that maybe a trench full of water is not at all a good thing to have in an infant-toddler program. It was a lot of work to fill it up.



An Environment for Adults

In our program we needed good spaces for both children and adults--students and parents. When we began to modify the indoor space at our off-campus site, we allotted about two-thirds of it to children and one-third to adults. The adults had a meeting room, a place to fix food and snacks, and a toilet and lavatory. It was important that

parents have a place from which they could be accessible to the children when needed, yet be physically separate.

Outdoors, the design which placed infants in the center, surrounded by toddler space, worked well not only for children but also for adults, though it was only later that we were able to verbalize why. What we finally realized was that adults who are caring for infants tend to get bored. For a child who is beginning to develop hand-eye coordination, it is developmentally important to be able to lie under a mobile for half an hour, trying to get her right hand to connect with the red ring over her head. An adult watching that child has a more limited attention span, and two-and-a-half hours of concerned watching of infants during the program can be a severe strain on adults.

It's important that adults be physically present and available to the infants, but you just can't isolate adults with very young infants for any period of time and expect them to stay emotionally present and productive. A wide-age program, in which the adults who are with the infants can watch the whole panorama of what is happening with the older children and have opportunities to talk with the adults who are with them, offers these adults the social stimulation they need.

When we had to leave this site and move our program back to the campus, our interior space was extremely cramped, so we had to make the most of the outdoors. We still hadn't fully realized how difficult it was for adults to be with the very littlest children. The enclosed play yard which was available seemed most appropriate for the older children. Since the immobile children weren't in danger of getting away, we thought we could just put them out in the open space on the front lawn, where they could watch the cars go by and that sort of thing. What we found was that we couldn't get any staff to stay with them, though they weren't able to be direct about saying, "You know, it's boring out there. There's nothing to do."

I got more insight into this feeling when I spent some time observing at MacLaren Hall, which is a high-security holding facility for children who have been abandoned, abused or sexually molested. The women taking care of the infants there tended to be of fairly low socioeconomic status, without much professional background. They would have the children in playpens or in little jump seats, and they would be folding diapers, or sewing buttons on dresses, or putting little pieces of lace on dresses. After I'd been around for awhile I felt I could ask, "Why do you spend your time doing this, rather than talking to or playing with the baby or holding him on your lap?" I got the message finally that they really needed to know that they were "working." They needed a visible product, like piles of folded diapers, and lace on the edge of dresses, and buttons. I remembered the days when I was at home with four little children, and used to leave all the ironing out at the end of the day, instead of putting it away, because I needed to know that I had done something. It is very difficult for an adult to feel she has accomplished something if all she has done is watch someone sleep all morning, or do his reaching for a mobile.

We found it hard to begin to verbalize the fact that, in an infant program, just being there is worth being paid for, worth getting college units for, or whatever it is that is happening. If a child needed the adult for only three-and-a-half minutes out of the hour, it was important that those three-and-a-half minutes were available to that child on her demand when she needed it. When we were able to talk about it, to say, "You do want to be available, but it is kind of boring; you are an adult and there are other things you need in order to survive," then we could reexamine our use of space and resources available to the adults.

What we did was to move the infants and those adults into the center of the play yard again--into an enclosed oval space we called the "egg." We put half a deck in it and covered the rest of the surface with dichondra. The deck was for adults to put all the babies' equipment on, up off the dirt. It was built very low. I had observed that if adults put babies down on the floor or a low deck or on the ground, and sit down themselves, their tendency is not to get up again. With very young infants you want the adult right there, not ten or fifteen feet away, or talking to someone else, or getting a cup of coffee, so you build a deck that is small enough to hold three to five young children and one or two adults, low enough so that it's difficult to get up from, and comfortable enough so that adults will enjoy staying there for a long period of time. You give them lots of soft things to sit on--mattresses and pillows--and things to lean against, interesting toys for the babies, plenty of snacks, and an interesting environment going on around them, with a barrier that's high enough to keep creepers in but low enough so that adults can see out over it. It has everything they need in it--all the children's equipment (so they don't have to get up and go for a diaper), all the children's food, and food and liquid for the adults. If they want to take notes or read a book, those things have to be available. The adults and the babies then have a nice symbiotic working environment. The adults don't feel they ought to be out moving around and doing other things; that's their space, that's where they're supposed to be. The space is soft and comfortable and nurturing for adults, which enables adults to be soft and comfortable and nurturing for the children.

The area for the exploratory children--those in the next stage--was connected to the infant area by a tunnel and by a little swinging gate. It was easy to go in and

out of, so that children who were ready to move out of this very sheltered environment could do so. The exploratory yard offered all sorts of locomotor challenges--little short decks and long walking ramps and stairs and sand and grass, and decks with no railings so children could begin to perceive the edges of things and learn about not falling off.

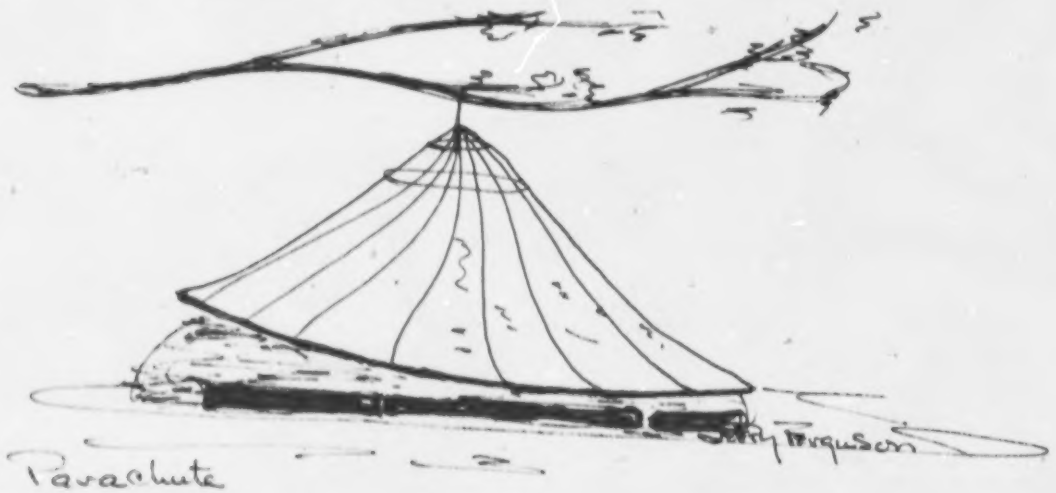
For adults in this yard, I created low, somewhat uncomfortable sitting spaces, twelve to sixteen inches above the ground. When they sat down, they were on eye level with the children. They tended not to sit for very long, because there were no soft surfaces. A pattern developed of adults' sitting for five minutes or so, then getting up and walking around for awhile, and then sitting somewhere else for five minutes more. This behavior makes adults appropriately available to children in this transition stage, who need a lot of physical support. Children take risks and fall over; they're not damaging themselves, but they get minor hurts and surprises and need moral support, to be brushed off and put back on their way. In more comfortable spaces than ours (or where there is no seating at all and the adults congregate, leaning against the wall in the sun or shade, as needed), adults tend to talk to each other and ignore the children. I wanted them to be roaming around and available, not sitting in nice comfortable little clutches.

I never explained this aspect of the yard to student teachers until the end of the semester, because they became incensed and accused me of being manipulative. I would try to explain the logic of it and then ask, "Did it work the way it was designed to work? How did you feel about it while you worked in it? Whom in the environment do you really have to look out for?" When students understood the reasons for experimenting with adult behavior, in terms of children's needs, they became more tolerant of the design.

The third segment of the yard was for the most well-developed children. It had large toys in it, climbing structures and slides. Children at this stage are developing autonomy. They need some space to do it themselves; they really don't need adults hovering around, helping them down the slide or up the ladder or through the little hole into the private space. That yard had no adult seating at all. Adults tended to walk into it, look around to make sure everything was O.K., and then go back to the other space and sit down for a little while. Since adults knew they were responsible for monitoring the entire area, they tended to monitor each other's behavior and to become concerned if they saw no adult in that yard. So there was nearly always an adult there, walking around, but not staying long and not interfering very much, because it really wasn't an adult-oriented space. Often adults sat for a while on the edge of the "egg," which extended into that yard; from it they could be available to the older children if needed and at the same time talk to the people who were with the babies, giving them some adult stimulation.

Tension Structures and Inflatables

At the time that the program was in this space, I was going to architecture school. During that time, I began experimenting with a couple of architectural concepts. One was the idea of using tension structures--things that hold their shape by means of tension (e.g., a tent). I purchased a large parachute, hung it from a tree, and put a tension ring around the outside, to hold it in a circular shape.



The parachute was hung very low, about two feet above the ground. I was experimenting with creating a sense of place with no physical boundaries around it, just a suspended roof. We created a soft space under the parachute with blankets and pillows. You had to crawl in and then you'd just sort of lie there, with a pink parachute above you and a tree above that. The tree made a visual pattern on the parachute, which adults and babies could lie and look at. It was a very intimate, soft and flexible space, low-cost and easy to set up and take down. It was also responsive to a slight touch. When children just touched the parachute it would swing back, knocking them over the first couple of times they tried it, but it wasn't dangerous, since it was so light. I also experimented with all kinds of things hanging on strings--balls, fabric-covered foam and crinkly paper.

Infants and toddlers are not physically strong and they're not well coordinated; their trunks and heads are big compared to the small size of their extremities, so they don't have good leverage. It is difficult for them to move large pieces of equipment and create their own structures, so it's fun to find something large which infants can impact. In experimenting with inflatables, I was also trying to enable children to have a big impact on materials. Inflatables give a big reaction from very little pressure. A beach ball, for example, four feet in diameter, that is only half inflated is an incredible large-muscle toy because it's unpredictable. Children jump onto it and it flips them off; they do a lot of trying to figure out cause and effect. A bean bag chair can provide a similar reaction. These things capitalize on children's energy rather than on leverage. Older children and adults use leverage to make an impact on their environment. Little children don't have much leverage, but they do have energy.

In a later play yard I developed a water bed idea--like a trampoline, but without its dangers. What I did was sink a two-by-twelve frame in the ground, to ground level, put two-inch foam padding on top of the frame and a water bed inside it. The ground was dug down so the water bed was just slightly above ground level. Then I covered the whole thing with a very strong tarpaulin, whose sides went down and were hooked to the frame, and put sand up against the frame so that the sand was continuous with the water surface. I put a hill on either side--just a little mound--so children could run down it and jump on the water bed. Jumping is a very difficult thing for toddlers to do, so you have to provide both for the children who can get both feet up simultaneously, which is hard, and for those who can't jump yet, who have to run and leap onto it. Water-filled things, like inflatables, offer infants and toddlers the chance to see a very big reaction for a small amount of energy on their part.

Program Philosophy and Physical Constraints

A physical environment for a program should be designed as a physical manifestation of that program's philosophy; for example, playpens and other cages would be inappropriate in a program whose goals included open-structured decision-making by children. The environment should reflect the philosophy, enhance and extend it. This is especially important in programs for infants and toddlers, since so much of their input is physical--psychomotor and sensory--and a large part of their stimulation is obtained by them through direct contact with the environment.

When part of Pacific Oaks' program moved to the Westmoreland campus, I was responsible for redesigning the space--two large houses and their yards--for our use. The Board of Trustees made its philosophy clear when buying the property: all segments of the community should be represented on both campuses--administration, faculty and staff, college students, children and parents. We decided to move the infant-toddler program to the Westmoreland site because the youngest children hadn't yet formed friendships with children in other yards, and so we wouldn't be removing them from existing relationships.

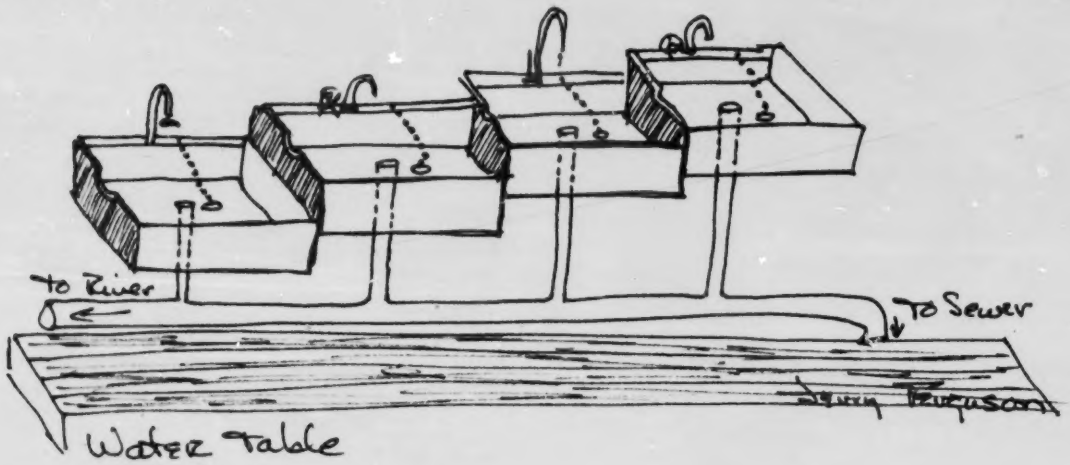
In planning for use of the site, it seemed to be very important, both physically and psychologically, to build a bridge between the two buildings, as it would be very difficult for people to go down a flight of stairs, across, and up another flight of stairs in order to carry on the natural activities between the two buildings. It also seemed important to have stairs up to the bridge, to provide an outdoor link between the ground and the second floor. Finally, it seemed important to locate the infant-toddler center right at that juncture, where there was both vertical and horizontal flow between the buildings, involving people from all segments of the Pacific Oaks community. I felt we needed to make the symbolic statement, to ourselves and to all the people who visit us, that we feel children are an integral part of our learning process, and that we learn a lot from children while they are learning from us. Putting them at this juncture made them available for all adults to see while going from building to building; they were also visible from library and office windows.

This philosophical stance meant locating the infant-toddler program in an extremely awkward physical setting. It was in a major movement system; it was on a hill; there were steep basement stairs; and it was a drain field for the whole building. But to put the program in any of the nice open grassy spaces which were available would have

meant putting it off in some corner, rather than right in the middle of the everyday flow, where it was an important physical and conceptual link in our whole philosophy.

You don't always have this sort of choice, because a difficult physical site costs more to build on than a simple one. But constraints of some sort are always givens in any situation, and it's important to integrate them into the whole plan, rather than ignore them. They are opportunities to solve problems, which make the whole process a lot richer.

The drain system was the biggest problem. Trying to think how not only not to ignore it, but to build on it as a positive thing, I came up with a four-level water table and a river.



The water table I had built before was all on one level, which meant that only children who were standing up and fairly agile could use it. This one has four levels. The lowest level is only six inches off the ground, so that crawlers can use it, and then there are three more levels that are higher, so that children are sorted out in terms of physical size and agility. The valve on the lowest level is very easy to use; it's the kind you turn on just by pushing against it. And when you move your hand it turns off automatically, since you can't trust a crawling baby to turn the water off. Each higher level has a more complex valve in it. (Choosing four different kinds was really fun; everyone in the store got involved in the process.)

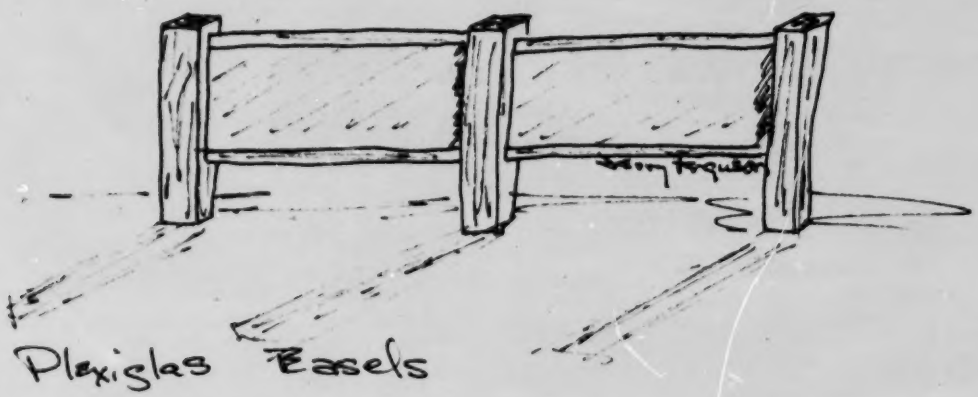
The levels are built so that children can either have individual experiences at each sink or get involved in social interaction. Each level has a plug. If you play in it with the plug out, the water just sort of runs down and disappears through the clear plastic tubes into the drain. If you put a plug in any of the three upper sinks, they will overflow naturally into the next one, which will have an effect on the child below.

The temperature of the water is controlled by the adult. Warm water is fed in by internal valves. Sometimes water is so cold children just can't play with it; having the option of slightly warm water enhances the possibilities of their play.

Below the water table there is a natural drain built into the concrete, which I chose to leave there. That led to the whole idea of putting in a river, so that the drainpipe and the water table both drain into the river. Since you don't want a real river in an infant yard, the water goes underground through drain tiles with a Japanese-garden-style river on top of them--stones and a trickle of water meandering across the grass. The adult has the option of letting the water all run down into the sewer or, by opening a valve, into the river. It depends on whether she's willing to have river play on any particular day.

On the hill below we want to route the river into an ecologically sound pool for older children, so that they can see the whole cycle of the rain falling on the roof, coming down the drainpipe, across the indentation in the concrete, going underground and resurfacing, and then into the pool to which they can have access and in which a variety of things can live. I care a lot about using constraints that are given and integrating them with the concepts and processes I feel are important. I would like to help children, and adults, get in touch with the natural processes these constraints represent. Taken together with my knowledge that one of the things babies like is water, this approach led to the development of this whole little subsystem.

We also have Plexiglas easels in this yard--each a vertical sheet of Plexiglas in a wooden frame. I invented them in the middle of the night, when I was trying to figure out how to help students see the difference between process and product. A child would make a painty squiggle, and the student would snatch the paper off the easel and put the child's name on it and say, "What a lovely picture you've made for your mother." If I were a toddler and it were my paper and I had made that marvelous squiggly mark on it and then someone else took it and put her mark on it, I think I wouldn't like it. It seemed to be an invasion of privacy.



On the Plexiglas you can't have a product to take home. You make your squiggle, and then someone else comes along and makes his; it can be a cumulative process, as there is no paper to take away. Another child can paint on the other side and the creative process becomes a social interaction process as well, but without interrupting either individual's painting. Colors blend; we can see light through both of our paintings; there's a whole complex visual perceptual thing going on. Children can try mirroring each other's actions, with the solid but transparent barrier in between. They can try taking turns: I do mine, then you do yours. There is also input to children's understanding of object permanence; a child can get rid of the child on the other side by painting him out, only to have him appear again in the next panel. In this setting, students are able to see painting as a process-oriented rather than a product-oriented activity.

When I designed the major play structure in this yard, I was very interested in the idea of cognitive mapping for very young children, and so the structure is complex in terms of access to areas. There are two major platforms, with spaces underneath; there is a swinging bridge; there is a ladder for children which also serves as a seat for adults. There is a textured ramp which leads up to the platform and down the slide. Access to the different areas is controlled by children's cognitive structures and physical ability. Children learn that there are different routes to get to the same place, some of them more complicated than others.

In the overall design of the space, situated as it is in the middle of traffic flow, I made sure that there were a lot of ways for adults to have access to the program without being interruptive. There are several ways for adults to observe children. From the high deck on the bridge, adults can look down and see the whole picture--the movement system and how the parts connect with each other. The intermediate deck is right over the major cognitive mapping area, so they can get a clear picture of that. And there is a walkway at ground level by which adults can get from one building to the other. The children's deck is raised, so that when they are on it they are at eye level with adults who are walking by. It seemed very important to me that children not always get the feeling they are being looked down upon.

The next deck I build is going to cantilever out over the fence, have Plexiglas sides on it, and look down on what I envision as the older children's area, around the pond. In the total plan, then, adults can look down at, be even with, and look up to children; and children can look up at, be even with, and look down at adults. I think it's important both that children not be intruded on and that they not always be looked down upon, and that adults have plenty of access to them.

Summary

We have tried to design a program in which all of us can become aware of both our needs as adults and those of infants, and also can build on strengths. It is not always comfortable, as the tendency toward comfort denies us the opportunity to take risks and make choices. I feel that risk-taking is important for infants, parents, students and faculty alike; we need some frustration, discomfort and difficulty in order to remain mentally and physically alert.

The physical and psycho-social environment needs to push participants to test their boundaries. Where do things end? To what can they extend? Why do we exclude? How can we include? The program offers its individual participants a shared experience, an extended family of choice. Participants are encouraged to explore the environment and compose their own experiences. The environment should be a living, responsive place in which the quality of the experience of the participants involves choice, responsibility, participation and mutual support.

FROM TRUST TO AUTONOMY:
PLANNING DAY CARE SPACE FOR INFANTS AND TODDLERS

Elizabeth Dimond

Erik Erikson (1950) describes the tasks facing the child under three as 1) the development of trust and 2) the development of autonomy. Basic trust, with its roots in quality relationship, gives the child a sense of being "all right" in the world. The sense of autonomy is based on the experience of making one's own choices within safe limits.

Erikson emphasizes that no one stage is ever really "finished." We revert, touching base again with previous stages, throughout our lifetime. Each change is gradual; each can be seen as a crisis out of which positive growth can occur.

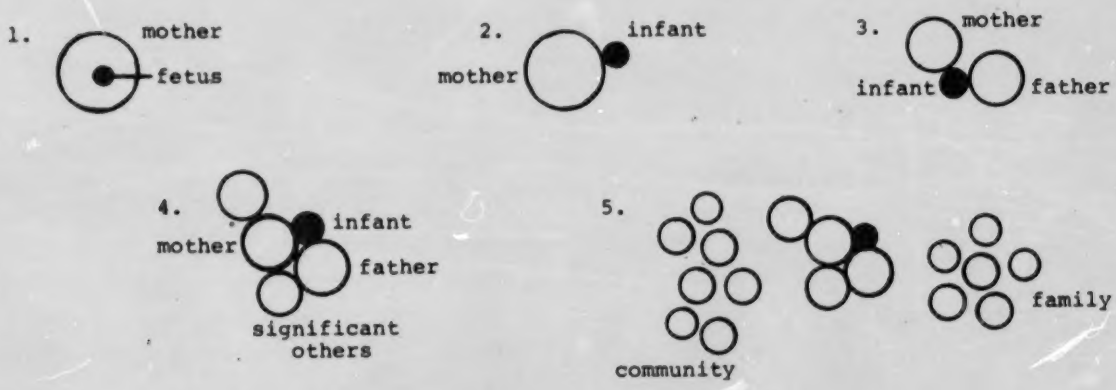
As a child development specialist concerned with programs for the youngest children, I have used this developmental theory as my base for planning growth experiences for infants and toddlers in day care. I believe that we who care for young children need to work very hard to build trust during the first months, realizing that nurturance for ourselves is important so that we may have an abundance of nurturance to give to the child. We need to work hard at allowing and supporting autonomy as the child gradually reaches out, only to race back for another reassuring hug. We need to accept the interplay of regression and growth, recognizing that "two steps forward, one step back" describes healthy growth more accurately than a picture of continued progress. As we read, discuss, watch, and listen to babies, and their parents, we can find a wealth of ways to nurture, to relate, to challenge, to support, to "plan program" for babies in their individual and collective growth and development.

The same principles of trust and autonomy which guide child-adult experience during these early years can be applied to the development of adequate and appropriate infant and toddler space. The space must be responsive to an infant's needs, regardless of where or how the space is created. This approach to planning uses a developmental model, rather than the educational model which has often guided space planning for young children. "Take a classroom..." NO! Start with, "...and a baby needs..."

Space, anyone's space, is both relational and physical. Let's try two words--consistency and challenge--which describe what infants and toddlers need, and see if each word can be interpreted in both relational and physical terms.

Consistency leads to trust. In relational terms, consistency implies a small number of caregivers whose physical care of, and affective relationship with, the infant give him a feeling of closeness, of attachment, of trust that things are O.K., both within and outside himself. Physical consistency implies an identifiable space whose parameters are regular, dependable, and comfortable.

Relational experiences for an infant seem to progress best when the number of contacts expands very gradually. The fetus maintains symbiosis with the mother, and at birth infant and mother remain very close. Gradually other family members enter the picture, and a slowly widening community of persons and places develops. As the infant's world expands, she needs continual opportunity to run back to a reassuring "one." This contact enables her again to move out and tackle more complicated people-contacts.



The expansion of the infant's experience with physical space follows a similar progression. Our spatial options for the care of infants and toddlers now include 1) home, 2) another family's home, and 3) group care. The home has traditionally provided the environment within which a baby can grow and develop, in terms of relationships as well as physical space. When an environment outside the home is needed, we don't need to construct something wildly different! We know that every home varies, yet homes follow a general pattern, with identifiable places for sleeping, eating, bathing, playing, and so on. When we begin to design new places for babies, we have this pattern available (Prescott, 1978).

Challenge leads to autonomy. In relational terms, challenge implies a willingness by caregivers to permit risk-taking and decision-making by the child. The adult takes responsibility for setting safe outer limits so that the risks taken are not inappropriate or dangerous. Within these limits, the child is given independence; "me do it" as a stance by the child is valued and supported by the adult.

In physical terms, autonomy implies opportunity for the child to explore a space which contains developmentally appropriate psychomotor and cognitive challenges. The child at home usually has predictable indoor space. It may or may not be "child-proofed" and thus safe for autonomous exploration, and it may or may not be adjacent to safe outdoor space which the child can investigate independently. However, it does offer a progression of experience, from indoors, from home to neighborhood. Again, the space provided in homes can serve us as a model for designing space in a day care center.

Designing a Group Care Center

In 1972, when I was Coordinator of Child Development Services at The Big Sister League of Los Angeles,[1] we had the opportunity to design a new program, The Colleague Infant Care Center. In this process the staff worked closely with Jack Trumbo, of Hirshen and Partners, Architects, in Berkeley, to define our goals and needs and translate them into a design for a building.

In lengthy meetings we talked about our dreams and our expectations, identifying our priorities and our options. The policies and activities proposed for the center were identified, and questions were raised about the implications of each for the design of the space. Each staff and committee member had a workbook prepared by the architect, to which all made their written and oral responses. For example, two sections of the activity analysis read:

Description: ACTIVE PLAY WITH/WITHOUT PEERS AND ADULTS; FINE AND GROSS MOTOR ACTIVITY

Sub-activities:

1. *Going to play area from inside area.*
2. *Getting out play equipment.*
3. *Play.*
4. *Storing play equipment.*

Questions:

1. *Will each group have its own indoor and outdoor play area?*
2. *Will there be a combined indoor-outdoor play area?*
3. *How will each group use the outdoor play equipment: sequentially or simultaneously?*
4. *What kinds of active play and equipment are anticipated?*

Description: FEEDING

Sub-activities

1. *Food preparation: cooking, setting tables.*
2. *Seating infants.*
3. *Serving.*
4. *Clean-up.*

Questions:

1. *Where will food be prepared? Residence, center, outside?*

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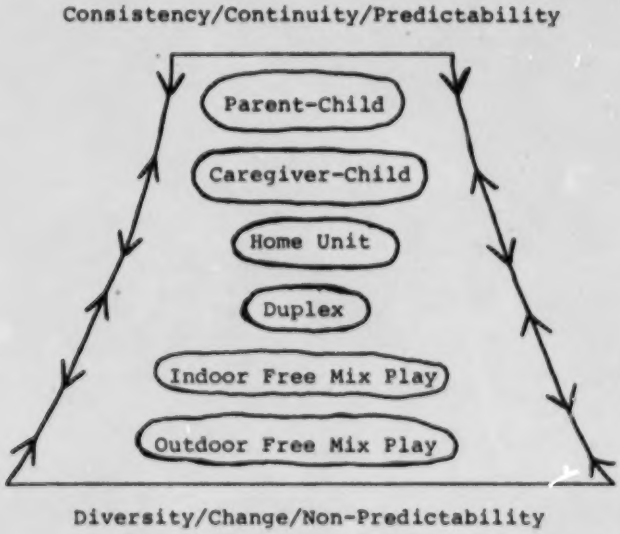
[1]Big Sister League offers social services, including a residence, to pregnant teenagers and young single mothers and their children.

2. *Where will the children eat? In their own group areas? As groups? Simultaneously in one large area?*
3. *Will there be special provision made for mothers who wish to nurse their babies--a private area for them?*
4. *How many should be fed at once?*
5. *Will the number of volunteer staff increase at mealtimes?*
6. *Should infant feeding be isolated from potentially distracting activities?* (Trumbo, 1972a)

Our dialogue was summarized by the architect in a master planning report, from which the following paragraphs describe some of the critical features of the plan:

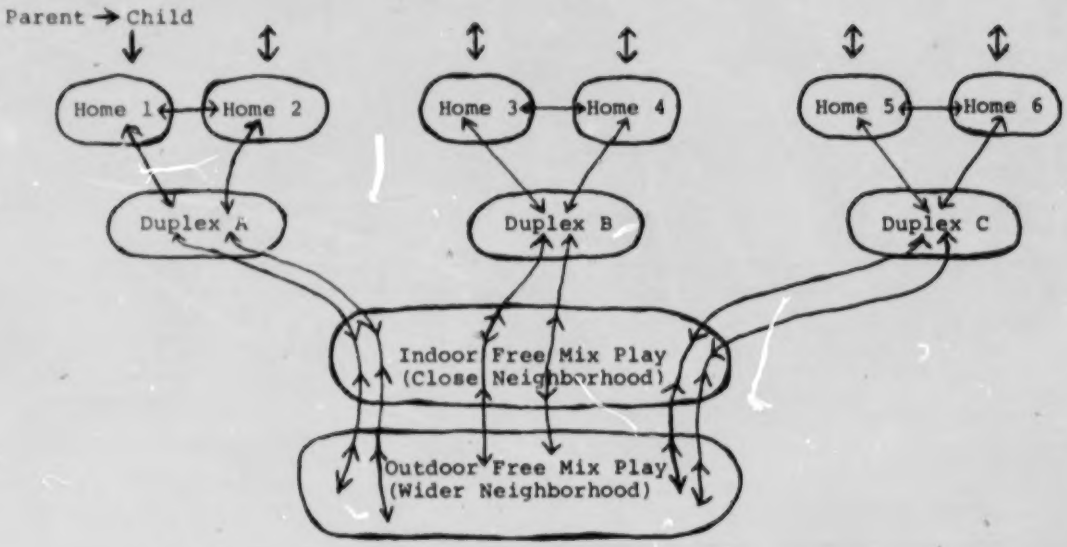
> *Basic grouping will be cross-age or "family" style. Six*[2] *children of varying ages will be assigned to two caregivers--a primary and secondary--in a "home unit." Two of these home units will form a "duplex" serving as home base for a minimum of twelve children.*
>
> *The home unit population will be kept stable. New family members will be incorporated as vacancies permit, but children will not be transferred from one home unit to another as a rule. The home unit population may be heavily weighted with one age group during certain periods, although a wide age spread is the ideal.*
>
> *Because there are definite benefits to be derived from activities designed for specific developmental stages, children from the home unit will be offered peer group activity of this nature. These activities will take place outside the home unit.*
>
> *It is hoped that children will gain maximum benefit from this mixture of grouping styles. A certain amount of voluntary interaction between mobile children and other staff and children is anticipated. Children will be free to seek out favorite staff or friends for talk or play, returning to their home units for replenishment, much as they might do at home after a stint with the neighborhood gang.* (Trumbo, 1972b)

We wanted to provide a base of consistency, continuity, and predictability from which children could move, by their own choice as they became ready, toward increasing diversity, change, and non-predictability, and then back again. Our aim was to have this caregiving and developmental environment concept remain consistent in both program and architecture. We diagrammed it as follows:



[2]Later, seven children.

The plan that evolved called for six home units in three duplexes, all of them sharing indoor and outdoor free mix space:



Home Units

Each home unit (see plan) had its own feeding, sleeping, and indoor and outdoor play areas. It shared a kitchen and diapering/toileting area with the other home unit in its duplex. All the home units had direct access to the "neighborhood" play area which we called the "free mix"; it included larger indoor and outdoor spaces. They also had access to the services of a preparation kitchen, a housekeeper, a center director, and the general administrative services of the agency.

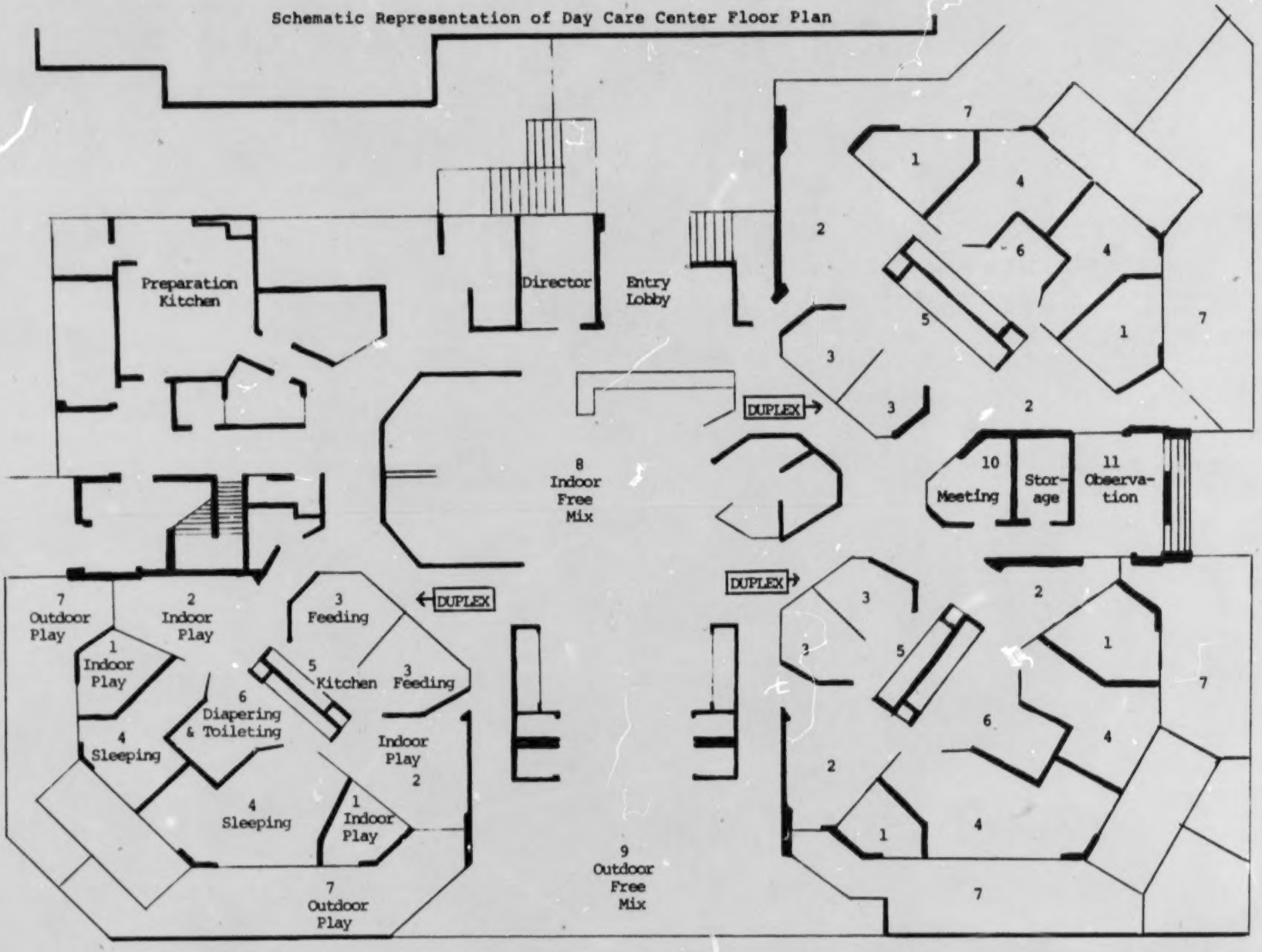
The home unit was conceptualized as the stable small space which provides consistency and builds trust--a place to begin in and come home to. In the cross-age grouping which we envisioned, each child would begin in a particular home unit and remain in it, with half-a-dozen other children in the zero-to-three age range, until he left the center. As far as possible, he would experience consistency of caregivers; even more, he would experience consistency of place. In the day-care day, a child is usually present for longer than any one caregiver; from year to year, the turnover of caregivers may well be greater than the turnover of children. Even when the familiar caregiver is present, she may need to attend to another child's needs. If trust is indeed basic, and building trust takes constancy and consistency, how can it happen in day care? We tried to provide a base for trust with stable space--a familiar place which was the child's own.

Like a home, this space was divided into separate areas, each with a clearly defined function. As they became mobile, children could move freely from one area to the other. There were no doors between the indoor play, toileting, and kitchen areas. Doors to the sleeping area, the outdoor play area, and the free mix area could be used to close off access to those areas to children; however, the doors to outdoors and to the free mix had low knobs which could be opened by a child competent enough to do so. There were walls and corners; everyone wasn't in everyone else's view all the time. It is not only difficult to provide consistency in day care; it is also difficult to provide privacy, which is essential to autonomy. In the home unit there were private spaces. The space was safe; a child on her own in it was not at serious risk.

Children at home are often out of sight of an adult, giving them the opportunity for autonomous decision-making. While liability increases in day care, it is possible to design the space to be much safer for young children than the average home. The home units were planned so that nothing would be accessible to children that was unsafe for them. Often adults in day care tend to hover over children, intruding on their privacy. We wanted the children to go from trusting the space to being able to use it autonomously. Did adults need to be able to see into every cranny? Why couldn't a child be in the little raised play area by herself, without adult eyes peering in?

The other day I called a friend of mine who has a two-year-old and a three-month-old. I asked about the two-year-old, and the mother said, "Oh, I wonder. She must be

Schematic Representation of Day Care Center Floor Plan



somewhere in the house, doing what two-year-olds do." That's how parents survive life with a two-year-old; they don't watch her every minute. They do listen, and they go and check if it's too noisy--or too quiet.

In the center there was good vision into most areas, at the adult level. There were two adults present in the home unit and two more in the other half of the duplex. Supervision of children was good but not intrusive.

In the home unit a child could go into the toileting area, and there wouldn't necessarily be an adult there. He could turn the water on and off; the trough sink was perfect for water play. If the adult had not secured the door, he could open the dutch door with its low knob and go out into the small walled yard. A walking child could go out through the other dutch door into the free mix area. He would be expected to tell an adult, "I want to go ride my trike," and the adult could say, "Fine, I'll see you at lunch," and the child would be expected to shut the door behind himself to keep the crawlers in. With independence goes responsibility.

When we first began planning we were thinking of having just one big outdoor space, where everyone could go outside. But the more we talked about the principle of the thing, the more we realized that we wanted the home space to be as complete an experience for the child as possible. If a child wanted to go out, it should be physically possible for him to do so without help from an adult, and he shouldn't have to wait until he was big enough to go out into the free mix by himself. Our concept was that children should become comfortable enough to make their own decision to leave home. Of course there would be times when they would be helped and would want to be helped; but we wanted to build in the possibility of independent action.[3]

Each home unit had two indoor play spaces (numbers 1 and 2 on plan), both carpeted. One was a small, very soft space, two steps up from the rest of the unit. Its feeling of privacy came both from being higher and from the enclosure provided by a set of shelves that extended part way across the top of the stairs. We thought about extending the carpet up the walls and hanging soft sculptures above it. A child in the corner of this room could get a good feeling of "own-ness," yet be perfectly safe.

The adjacent play area was more in the flow of traffic. It had space for an adult rocking chair, and for storage. It had a fold-out table, the size of a small desk, which could be used for table activities by standing-up children.

We did have trouble interpreting this space design to the licensing agency. The state required an adult-child ratio in infant programs of one to four, and we were proposing two to seven, which was in conformity. We also had the required thirty-five square feet per child, but the licensing representatives felt that that much space should be provided in each area. What if all seven children are asleep? they asked. There isn't adequate space in the sleeping room. They seemed to feel that too little space in sleeping quarters meant that children might breathe germs on each other; these were, of course, the children who had been chewing on the same stuffed alligator all morning. Eventually we were able to insist that they look at total space, which did meet the requirements, and we succeeded in getting our license.

Free Mix

The free mix area was planned to be staffed by several adults with a different sort of responsibility and competence from those in the home unit. They would be primarily environment-rearrangers. That's what adults do in groups of toddlers--arrange the environment and provide age-appropriate creative activities and try to keep half a jump ahead of each child, as necessary. We expected these adults to be warm and caring and hugging, but to function more as "recreation leaders" than as caregivers. If a child needed his pants changed or something to eat, then it was time for him to go back to the home unit. The free mix area was a place for children to be autonomous; primary nurturing was provided at "home."

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[3]We saw this happening in an eight-week pilot program held in this center, in which mothers stayed with the children. A sixteen-month-old who had never had to deal with separation before spent a lot of time dealing with it in our program. Then one day we saw him make the decision to crawl out through the door into the home unit play yard and go all the way to the sandbox. It was clear that he was able to do it on his own only because his mother could watch him and he could watch his mother. He kept looking back at the door to reassure himself that she was in there, even when he moved past the point from which he could actually see her.

Working in parent-child programs, we ask the parent to sit down with the child and wait until the child is ready to go away. We don't do anything to lure the child away, except that she can see the play that is happening and the things that are there to be explored. We have had no problems, except the need to reassure mothers that it is really O.K. if your child sits on your lap. When she is ready, she will go. And she does.

While the free mix area was planned primarily for toddlers, we also hoped to put a large elevated playpen in it--a safe, contained space where turners-over and just-crawlers could be safe in the middle of the action and able to see what was going on. Children are put in very large playpens at Loczy (see page 41), where it has been found that, given a chance, a child will attend to herself and her private interests for a long time. Several eight-month-olds in such a space are not a danger to each other, and it offers them the option of attending to their own interests, to each other, and to the surrounding action.

Adult Spaces

We found, when the building was completed, that the free mix area was larger than it needed to be and the home units were too small. We could have taken off eight to ten feet on each side to extend the play space in the home unit, allowing more adequate room for traffic flow, storage, play space for children, and space in which adults could be comfortable. We knew from the beginning that adult space was important, but we didn't provide enough of it within the home units.

In homes there is space for adults as well as children. In group care adults need places within the child spaces where they can take care of themselves as well as children--sit in a comfortable chair, put their feet up, make a cup of coffee, have adult conversation. They also need private spaces for times away from the children.

The only piece of adult furniture planned for the home units was a rocking chair. We spent a lot of time researching those rocking chairs, to ensure that they would be comfortable to hold babies in all day, and that they wouldn't tip when children climbed on them. They were, in fact, both comfortable and safe. For our pilot parent-child program we added a very large bean bag chair and a couple of crib mattresses to sit on. They took up most of the play space.

We did find that the many walls within the space provided a sense of privacy for adults as well as for children. In our parent-child program the space in the home unit was very crowded. Nevertheless, it was possible for the adults to have a physical level of their own which permitted conversation above the level of the children--either standing or sitting down. This was a nice surprise. In my previous experience, when you have adults with children in a large square room, and the adults are standing up and talking to each other, it feels all wrong; they tower above the knee-high children, and I find myself asking them to sit down. But in the home unit the adults were not the only vertical things in the space. There were also walls, breaking up the space, acting as sound barriers, offering something to lean against. Also the spaces were too small to have very many adults present in any one area.

The building as a whole had several private spaces for adults. Each duplex had a small cupboard for caregivers' purses and coats. There was a small meeting room adjacent to the duplexes (number 10 on plan) to be used for parent conferences. There was an "observation" room with a one-way mirror between two of the duplexes (number 11 on plan). This room could be used for individual play sessions or testing of children and was also available for adult use. On the second floor, where the office and meeting rooms serving the agency's general functions were located, there was a staff room with a private resting space, a kitchenette, a library, a small outdoor deck, and storage space for personal belongings. One upstairs room, which overlooked the free mix area, held the children's files, with space for staff members to write notes to be added to them. This is a "duty" for caregivers in day care which is easy to put off; we hoped that providing a place to do it would help.

We planned for as much support as possible for the caregivers in the home units. The duplex kitchens were well stocked and equipped, so that if the caregiver wanted to make gelatin or cookies or needed a snack for a tired child, everything was right there. Milk and eggs and fruit juice and staple foods were always on hand. There were storage spaces for diapers and towels and sheets and extra clothes and health care supplies. The housekeeper was responsible for seeing that all these supplies were always there. We saw such a person as an essential support for the caregivers. Day care is very intense work; we felt it was essential to provide for the comfort of the caregivers and to spare them extra planning and running around to get things.

Major meal preparation took place in the central kitchen. Foods such as meatloaf might come uncooked to the home unit at mid-morning, to be baked in the oven there; the smell of cooking makes a place more homelike. The preparation kitchen could also serve as back-up for the home unit in special cooking projects--preparing cookie dough, for example, and leaving only one or two items to be added by the caregiver with the children. We spent a lot of time talking about food and its meaning for children (and adults!), and trying to devise practical ways of keeping food service flexible. We wanted caregivers to be free to respond to children's needs for food at varying times, not to have to adapt to a time-bound delivery system.

Guidelines

This same general plan has been adapted for use in other centers. Observing it in a migrant infant program, I saw what happens when a space which reflects a particular philosophy is used by people who do not share that philosophy. In the culture from which the migrant children and their caregivers come, dependency in small children is encouraged. Children are carried until they are two or three. They are not put down on the floor; the floors of their homes are splintery wood or bare earth. The homes are not safe places for autonomous toddlers. But the center is, and so some changes in behavior would be appropriate. Relationships in the center were a joy to watch; I felt that with some guidance the space might well have been used more effectively to accomplish its goals.

Recently I have been helping the staff of a new teen-parent program design its center, which is located in several storefronts. We spent time together drawing the space as we would like to develop it, providing traffic flow, identifiable spaces for children, and adult spaces, while keeping costs down. Of course we discovered later that there were walls we didn't know were absolutely necessary, and others that had to come out, and water pipes that were not where we thought they were. But the basic plan works, and it was easy to do.

In an environment for infants and toddlers designed to promote trust and autonomy, I believe you need all these kinds of spaces:

1. An eating place connected with where the food is and where the refrigerator and stove are.
2. A space for diapering, bathing, and toileting, where the child's own things are kept.
3. A sleeping space which can be darkened and which looks like a sleeping space. Each child's comforting things are there--her own blanket and teddy bear.
4. Clearly identifiable play spaces, which lead naturally to an outdoor play space.
5. Adult space. (In the teen-parent program it's now a tiny lounge with a broken-down couch--that's a start!)
6. Appropriate adult meeting space. (In this program it is a classroom for the mothers, on the far side of the hall.)
7. Office space.

The traffic flow through the space is easy to visualize. Adults cannot just walk in through the child space. If you need something from the kitchen, you don't walk through the play space. More physical barriers will be added eventually, in this program, but even without them the boundaries are clear.

One day when just a few babies were enrolled in the program, the fire inspector came. He was a large man with a gruff voice, and he was telling us everything that was wrong with the space, and he started to step into the carpeted area where the children were playing. Suddenly he stopped, his foot literally in the air; it was apparent that he felt as if there were a gate across there. He asked, "Oh--am I supposed to step over here?" Then he added, "Well, I have to because I have to get to that door over there." Everyone laughed and talked about it. We agreed that since we had no "sockies" big enough for his feet, an exception would be made.[4]

Summary: Planning for Infants and Toddlers

The program described here reflects the assumption that infant-toddler development proceeds from trust to autonomy, and that certain patterns of relationships and space design are optimal for supporting this development. Our choice of cross-age grouping (birth to three years) of children in each home unit was made for both developmental and practical reasons. Administratively, cross-age grouping simplifies the enrollment process; you don't have to wait to enroll a child until there is an opening in his age group. Developmentally, the age range provides a more real-life experience and greater stability of place for the child; he can stay in the same home unit for his entire time in the center.

To make such an age mix work, belief in the autonomy of the older children is essential. An older child may have to wait for the caregiver to give a bottle to the baby or rock it to sleep. Learning to wait is part of getting older. Resources need to be available to help waiting children meet some of their own needs, rather than whining or just wandering around. This space plan enables a crawling or walking child to get herself to the cuddly toys in the soft play area, to the water in the bathroom

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[4]Caregivers in this center don't wear shoes at any time; they wear "sockies" on their feet. Sockies are also available for other people entering the center, to be worn in the carpeted play spaces.

sink; to the plate of crackers on the table. Ideally each child would have a place of her very own to go to--her special picture on the wall, her favorite pillow in the corner.

The space is designed to offer opportunities for stability, for independent exploration, and for regression as an inevitable part of the process of growth. Children, as they become mobile, can choose where to be. They can choose to leave the caring adult and the familiar space, venturing into a room with no adult present, or out into the small yard, or into the other half of the duplex next door, or into the large free mix area full of less familiar things and people. They can also choose not to venture out, seeking safety and familiarity instead. For example, a two-year-old who has had everything he chose to play with grabbed by someone else in the free mix sandbox this morning might decide tomorrow to stay "home" all day, where he is the only two-year-old and he can have the small sand area all to himself for long periods. In this program adults do not insist that children "play nicely" together. Children are given support in solving their own problems. They are also allowed to withdraw from social problem-solving for a time, building up their private resources before they try again in the wider world.

We did not want experience in this day care program to make children more dependent than home-reared children. Day care experience often makes children appear more independent to the observer, but sometimes this "independence" is in fact a lack of attachment to anybody. The child has learned not to care too much. Instead, we hoped to provide opportunity for real attachment to both place and persons and for real autonomous choice without being hovered over.

True independence includes risk-taking and learning to take responsibility for one's own safety and comfort. We wanted children to begin to solve their own problems without calling for help. Often in group care children get little help in solving their emotional problems, but their physical problems are solved for them all the time. Both these outcomes result from dealing with children in a group; it is simpler for the adult not to wait for a toddler to help himself in tasks requiring physical coordination, and all this caretaking activity on the adult's part keeps her too busy to be available to individual children for cuddling or conversation.

Excessive concern for providing safety by means of physical barriers and constant supervision may interfere with the development of responsible children. Containment is not the only factor involved in safe environments for children. If a mother takes her twins to the park, she has to help them learn to stop at the curb, to stay on the grassy area and out of the bike path, to hold on tight while climbing. This requires effort on her part and on theirs. It's worth it. A day care center is designed to be safe; it should also be designed to offer appropriate risks. A child cannot learn to keep herself safe, to experience the rewards of being autonomous, when there is nothing in the setting to be autonomous about.

This space was designed to meet the needs of a staff who shared a particular philosophy of early development. It would probably be used quite differently, and less happily, by adults with a different point of view about day care for very young children. In my experience there is no such thing as all-purpose space; space is philosophy made visible.

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RESPECTING INFANTS: THE LOCZY MODEL OF INFANT CARE

Magda Gerber

The theoretical debate about whether or not infants should have substitute or supplemental group care available outside of the family setting has abated, as the requirements of our society have determined the issue. Now, of necessity, the quest is for improving the quality of infant care (Caldwell, 1974; Dittman, 1973; Kagan, 1976; Provence, 1977; Ricciuti, 1976). Infant programs in this country have often been infant stimulation programs. The appeal of infant teaching and stimulation now appears to be undergoing reconsideration, however, with concern being expressed about the hazards of overstimulation. We are moving into a period where "the term infant stimulation is misleading and should not be used in identifying educational programs appropriate for young infants and their parents." (Bromwich, 1977, p. 81)

Professional group care of infants is itself in its infancy. Except for a few model programs led by pioneers in group infant care, most centers and day care homes operate with very little preparation or experience. Historically, group care brings to mind the dreary conditions in orphanages where, in spite of proper nutrition and hygiene, mortality was high, and most of the children who did survive failed to thrive. In his well-known article on the subject, Spitz (1945) called public attention to the phenomenon that he termed "hospitalism," the devastating effect which institutional care had on infants. The deviant development of these institutionalized children was attributed to lack of sensory stimulation and/or the lack of a close, nurturing relationship.

As a result, most subsequent research on infancy has explored cognitive and/or emotional aspects of development. Existing infant programs have been influenced by these two emphases. Professionals attempting to meet the infant's need for a nurturing environment are likely to be concerned with a high adult-child ratio, body contact between the caregiver and child, and the availability of rocking chairs. Those following the cognitive model often make use of learning "kits" and develop curriculum aimed at teaching and stimulating the infant.

The purpose of this paper is to describe an institution which offers an alternative model contrasting with much that is currently being done in group care: the National Methodological Institute for Residential Nurseries, in Budapest, Hungary.[1] The Institute is known as "Loczy" for the street upon which it is located. For thirty years, Loczy has been guided by the same unifying philosophy and well-defined methodology, with the daily life of each infant in its care being scientifically observed and studied. Research findings have provided feedback for continuous improvement of conditions at the Institute.

The basic philosophy of Loczy could be represented by Bruner:

> *There is inherent in the description given of the growth of infant skill an emphasis on self-initiated, intentional behavior. Surely the chief practical recommendation one would have to make...is that the infant should be encouraged to venture, rewarded for venturing his own acts, and sustained against distraction or premature interferences in carrying them out. It is a point of view very alien from such ideas as preventing "deprivation" or providing enrichment, both of which are highly passive conceptions...* (Bruner, 1973, p. 8)

History

Loczy is a residence for normal infants from birth to three years of age, with a capacity to serve seventy infants. It was founded in 1946, after World War II had left many infants in Hungary without parents and in need of full-time care. Located in a former private home on a hillside surrounded by large gardens, the Institute has served nearly 2,000 infants who have spent their first three years there. The Institute operates with seventy full-time staff: five medical doctors, six psychologists, twenty-three carers,[2] plus researchers, aides, registered nurses, librarians, administrators, and support staff. Each staff member has a specifically defined role to perform in the actual care of the infants or in areas of supervision and research. In addition to their pro-

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[1]Previously called the National Methodological Institute for Infant Care and Education.

[2]Called "infant-nurse" by the Institute. "Carer" is preferred by the author, rather than caregiver or caretaker, because of the emphasis on caring, not on giving or taking.

fessional education, staff members are trained in the philosophy of Loczy.

The Institute has been under the continuous direction of its founder, Emmi Pikler, M.D. Fully aware of the potential harmful effects of institutional care on infants, Dr. Pikler began Loczy while acknowledging that an average family is a far better environment for an infant than even a good institution. Since an institutional setting, by its very nature, is an artificial place in which to raise infants, she exercised great effort to create a meaningful life for the children. Her goal was not only to prevent "hospitalism," but to foster a special relationship with a consistent carer. She determined to achieve genuine involvement in the environment and a growing feeling of individuality in each child.

Dr. Pikler is well-known in Europe for her original ideas on infant rearing. After receiving her medical degree in Vienna, she developed what was to become a life-long interest in the physiology of gross motor development. Her interests concerned the differences in gross motor development of normal children under two different conditions: 1) when motor development is influenced by adult intervention (positioning, exercising, restricting) and 2) when motor development naturally occurs without adult intervention. Dr. Pikler became an advocate of "non-interference"--of letting the infant develop at his own rate. She suggested that by allowing the child freedom of movement, parents would develop respect for their baby's individual tempo and style in other areas of development as well.

Emmi Pikler first applied her hypothesis when raising her own daughter, and, as a family pediatrician, she became influential in the way her families raised their infants. Making weekly visits to the homes of these families, she would spend hours observing and facilitating the mutual adaptation of the infant and the family. The children of these first one hundred families became the prototypes for the thousands of children who would spend their first years at the Institute. Known as "Loczy babies," these children were described by authorities to be alert, exploratory, autonomous--terms rarely applied to institutionally-raised infants of the 1940's. These initial results prompted greater investigation of conditions at the Institute.

Two respected French authorities on infants, Dr. Myriam David, a child psychiatrist, and Genevieve Appell, psychologist, reported after their first visit to the Institute:

> *From the first step into the house, one is fascinated by the looks of the children: flourishing babies...with tanned complexion, harmonious proportions and movements, involved for the most part of the day in various activities, in good contact with adults, without being too dependent on them. The groups are peaceful: among the children there are astoundingly few conflicts, although interactions begin as early as four to five months.* (Hermann, 1972, p. 92)

Intrigued by their brief first visit, Dr. David and Ms. Appell returned to Loczy for an extensive observation. They published their findings in a book, Loczy, ou le Maternage Insolite[3] (1973), which describes the organization and its methodology of infant care.

Philosophy

The following outline gives the essence of the principles and philosophy of Loczy:

1. An infant living in an institution derives security from a predictable environment and the opportunity for anticipation and making choices.

2. An infant needs an intimate, stable relationship with one constant person (mother figure).

3. This relationship can best be developed during individualized caregiving activities.

4. Respect is shown by treating the infant as an active participant rather than as a passive recipient in all interactions.

5. The infant does not need direct teaching or help to achieve natural stages of gross motor and sensorimotor development.

An expansion of these five principles follows.

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[3] Loczy, An Unusual Way of Caring. Translation by Gerber.

Predictable Environment

The environment that is carefully planned and structured takes into account that infants who are not living in their own homes derive security from permanency, constancy, and anticipation (Tardos, 1964). At Loczy, these qualities are provided through the careful organization of space, time, and interpersonal relations.

Indoor space is at a premium at Loczy. The children of all ages spend the larger part of their days out-of-doors; each group has its own fully equipped area. There are a wading pool and several large sandboxes with sand piled as high as four to five feet. There are duplicate cribs (both in and out-of-doors) for each child, plus changing tables for each group, located on the terraces and in the large gardens. Within a predictable rhythm of daily life (regular times for sleeping, eating, staying outside and inside, etc.) the infants have time for long periods of uninterrupted exploratory play in a safe environment. The stability of the environment and the time structuring of routine provide predictability on a long-range basis.

On an interpersonal level, the infant is encouraged to anticipate what will happen next by telling him[4] about it before it occurs. This provides an opportunity for his active participation and involvement. For example, anticipation within daily routine activities is aided by telling and showing the infant what is going to be done ("I'm going to pick you up now..."), giving the child time to respond (e.g., reaching out, crying, or showing disinterest), and then respecting the child's reactions whenever possible. The carer differentiates between situations where the child has a real choice and where he does not. If there is a real choice ("Do you want to be picked up now?") and the child responds negatively or with disinterest, he is left alone. If no choice is involved, the carer does not ask, but states the intended action ("I'm going to pick you up now. It is time to go."). The child is picked up.

Mutual understanding, acceptance, and respect are promoted when both carer and child learn to anticipate each other's reactions.

Intimate Stable Relationships

The Loczy staff supports the belief that each infant needs to develop an intimate, stable relationship with one constant person. This is one of the most difficult objectives to put into practice in an institutional setting. To achieve this, nine children form a group and they are cared for by the same three carers throughout their entire stay at Loczy, living together as a unit in their own area. Although each carer is fully responsible for the nine infants during her shift, a special attachment is fostered and soon develops between each carer and her "own" three infants in the group. Thus, each carer becomes a mother figure of three children.

By maintaining ongoing records using a Loczy-designed scale and keeping diaries, the carer becomes intimately involved with "her" children, and the children respond by showing a differentiated reaction to their own carers as early as three or four months of age.

Individualized Care Activities

Trust and intimacy between carer and infant can best be developed during routine caregiving activities, and these most consistently repeated experiences have a cumulative effect on both infant and carer. If the carer gives total, unhurried attention each time she cares for the infant, he gets "refueled" with human contact and individual attention and is willing to autonomously explore. "As his motility, skills, and interests grow, his curiosity and the pleasure in discovery help him to leave the need-fulfilling object"--the carer (Gerber, 1971, p. 170). These same care activities also offer excellent opportunities for developing cooperation, speech, body image, and mutuality in task-oriented experiences. The child is encouraged to be an active participant rather than a passive recipient in these activities.

The interchange between carer and infant during caregiving activities at Loczy is represented by the following schema:

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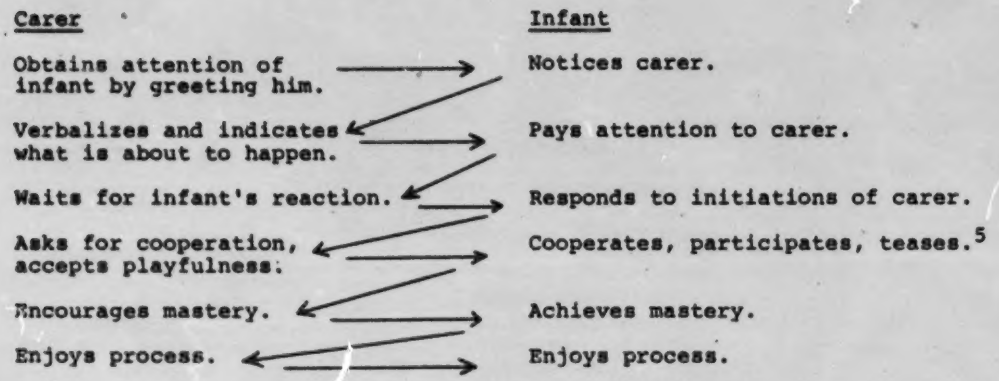
[4]Him or her. For simplicity's sake, the infant is always referred to as *him*, the carer as *she*.



Respect

The guiding spirit in all human interactions is respect. In order to comprehend the application of such an abstract, but often-used word, it is helpful to review the behaviors practiced at Loczy which are guided by respect.

1. Regardless of age, the infant is never talked about in the third person, but is directly addressed. When adults need to discuss an infant, it is not done in his presence.

2. A "dialogue" between carer and infant begins at the earliest age as the carer observes and acknowledges the baby's every response.

3. Infants are rarely forced to do anything. During feedings, for example. the baby is shown the spoon containing food and only when the infant indicates acceptance by opening his mouth is the food put in.

4. The infant is allowed to anticipate every step of what is about to happen to him. He is never picked up or put down without being told of the impending action. If he is asked to make a choice between actions, the infant's choice must be respected.

Respect is the guiding principle in situations other than routine care. It can best be defined as selective intervention and is based upon sensitive observation. Knowing when not to interfere is often more important and generally more difficult than indiscriminate intervention.

Whenever possible, the carer trusts the infant to solve problems as they occur in his daily existence. When observing a seven-month-old trying to get a ball which is stuck, the carer may just wait or may comment, "It's difficult to get that ball out, isn't it?" (Compare this approach with giving the child the ball or physically helping him.) In another situation, two fourteen-month-old children are pulling on the same toy. The carer might reflect, "Ann, you want that bear and you, John, want the bear, too." Often the calm tone of the voice of such impartial reflection is enough for the children to solve the conflict in their own way. (Compare this reflective, non-directive attitude with one where the adult becomes the problem-solver: "Ann had it first." "If you fight, I will take the toy away." "John, take another toy.")

At Loczy, the role of the carer is to facilitate the development of an active child who is challenged by problems, enjoys his autonomy, and trusts adults.

No Teaching

Loczy emphasizes that gross motor and sensorimotor development are best learned while the infant is freely exploring and manipulating in a safe, carefully designed environment. Spontaneous, self-initiated activities by the infant have an essential value for his physical and mental development in that the pleasure evolving from exploration and mastery is self-reinforcing. Subsequently, the infant becomes intrinsically motivated to learn. The Institute ensures this development with the following conditions: 1) non-restrictive clothing (the children, including the very young babies, are not tucked in or wrapped in blankets, but they are put into large sleeping bags which allow move-

[5]Playful teasing (doing the opposite of what is asked or expected) indicates developing trust.

ment); 2) ample space which is expanded with the infant's ability to move. When several infants share a common large playpen, an area of 1,550 square inches is allotted each child. The Institute has large room-size playpens, both in and out-of-doors, which allow the children to locomote by rolling, crawling, or creeping; 3) appropriate simple toys. Toys are never put into the infant's hand, but are placed at a reachable distance so that the child has to make an effort to obtain the toy. Once it is gained, he manipulates the toy as he chooses; 4) to quote Pikler: "The Institute withholds 'teaching' in any form. Under 'teaching' we understand systematic practice of certain motor skills by holding or keeping the child in a certain position, whether by adult or by equipment, or in any way helping him to make movements that he is not yet able to execute by himself in his daily life." (Pikler, 1971, p. 57)

The Loczy child is never placed in restrictive equipment such as an infant seat, car seat, swing, bouncer, or walker. High chairs are not used; each child is fed on the carer's lap until the child can independently use a chair or bench and table of appropriate size.

No extra stimulation is given to develop other areas such as perceptual, spatial, and fine motor skills. Since the child is not restricted, he uses several sense modalities simultaneously (e.g., moving, looking, reaching, touching, listening, and mouthing) and develops cognitive functioning by integrating information gained. In addition, the child develops a lengthy attention span because he is not interrupted in his explorations.

Training at Loczy

The care of the infants, training and supervision of staff, and research activities function as an interrelated whole. Because some of the developmental and behavioral goals at Loczy differ from the usual ones, a Developmental Chart (devised by Falk, 1968; 1971) is used for each child. This detailed program chart covers the following major areas of development:

1. Gross motor activity
2. Manipulation
3. Social relations (in particular, the infant's reactions during routine caregiving activities)
4. Eating habits
5. Speech.

The purposes of the chart are:

1. to keep reliable weekly records;
2. to provide data for supervision and research;
3. to evolve a "profile" for each child; and
4. to exert a desirable influence on the carer.

The one hundred items which the carer is required to fill out each week for each of her three children are based upon the Loczy principles of infant care. Ideals of cooperation as well as autonomy are built into the scale. The carer refers to a checklist to record the date of emergence of new behaviors as well as their duration. Since the child's reactions are considered to be reflective of each carer's competence, the carer will interact with the child in such a way as to facilitate the desired behavior. For example, in order to facilitate relaxation in a baby only a few weeks old, the carer will hold him securely, move slowly with him, and talk quietly to him. Since the carer must record when the baby is verbalizing, she will respond to his utterances, talk to him, and allow enough time for him to respond.

By contrast, gross motor activities are recorded only if they are at the infant's own initiation, with no help or prompting from the carer.

This unique form of charting provides feedback on the quality of the caregiving and, as a result, offers positive reinforcement to the attitudes of the carer. In addition, it provides reliable documentable data for research activities.

Research at Loczy

The fact that Loczy has operated under the same philosophy and methodology for three decades makes it a unique environment for conducting research (Hermann, 1972). Continuous observation and controlled studies have been carried out since 1960 in the areas of gross motor development (Pikler, 1968; 1971; 1972; Pikler and Tardos, 1969), manipulation (Barkoczi, 1963; Tardos, 1966), and infant interaction (Vincze, 1970). A longitudinal study funded by the World Health Organization (Falk and Pikler, 1972) documented the continued growth and adjustment to regular family life of "Loczy babies" following their adoption.

Research is naturalistic at Loczy; infants are observed and their behavior is recorded as they go about their daily routines rather than under artificial conditions. Investigators are interested in how the infant chooses to utilize his resources, not in what he can be made to do. This can best be exemplified by two research studies conducted at the Institute--one study on gross motor skills, the other on infant-infant interaction.

Gross Motor Development

Research on gross motor development has been conducted continuously at Loczy. These studies add another dimension to literature on the same subject. Loczy documents only self-initiated movements of the infant which occur as a result of neurophysiological maturation without any adult interference, help, or teaching. Reviewing the literature, Pikler (1971) found no research dealing exclusively with spontaneous occurrences of new motor skills. These skills are usually recorded in conjunction with those influenced by adult manipulation, e.g., pulling up, propping, positioning, and exercising. Similarly, infant tests (Bayley, Gesell, Illingsworth) that establish norms for the ages when new skills are achieved (sitting, standing, walking) do not clearly define the circumstances under which the child has learned them. This confusion may contribute to the creation of various beliefs, both cross-culturally and within our own culture, about what is necessary or helpful to promote healthy gross motor development.

In an account of 722 children raised at Loczy, the investigators described their movements as well-coordinated, economical, and cautious. "The children, without exception, attained the age-appropriate motor skills" (Pikler, 1971, p. 60), "...maintaining a stable high activity level during the whole period of learning new motor skills" (Pikler, 1971, p. 70), and "change their postures on average of at least once per minute" (Pikler, 1971, p. 75). This indicates that a child restricted from moving freely is deprived of the long hours of exercising in transitional postures before mastering the next developmental skill.

Infant-Infant Interaction

Except for some early studies by Buhler (1931), Bridges (1933), Freud and Dann (1951), the twin observation of Lichtenberger (1965), and the descriptive observations of Kibbutz-raised infants by Rabin (1955), the potential value of infant-infant interactions has been largely ignored by investigators of infant behavior. Apolloni and Cooke (1975) noted after reviewing existing literature on the subject that the interactions between infant and toddler peers familiar with one another have been a little recognized variable in infant development.

Conditions at Loczy are most favorable to conduct such studies of early peer interactions, since the infants grow up in a group and are allowed ample free play and interaction, with little adult intervention. This peer interaction of Loczy children was longitudinally studied over a two-year period by Vincze (1971). The group consisted of nine children, with the greatest age difference being six months. Social interactions were grouped into nine categories:

1. Contact by look, smile, sound
2. Initiation of contact by gesture or locomotion
3. Physical contact
4. Taking away an object
5. Offering or giving something
6. Imitation--acts performed together
7. Common activities--acts performed together
8. Verbal communications
9. Simulation of adult attitude towards peer/s.

In comparing these findings on children six to twelve months of age with those of Buhler and others, Vincze noted that although "taking objects from each other occurred quite frequently," the children reflected positive attitudes toward each other:

> *This age group is not characterized by a large number of conflicts; the social interrelation of the children seems to offer considerably more pleasure than discontent... We were able to record a substantially broader, more lively, and colorful range of social contacts than those recorded by Buhler in the experimental situation. Our data seem to be closer to the pattern of social contacts as recorded by Lichtenberger, based on his observations of his own twins.* (Vincze, 1971, p. 39)

Two areas of research have been elaborated upon here. Loczy publishes much of its own research work and, in addition, publishes textbooks, books for general readership

(especially for parents), monographs, and numerous articles. Loczy has produced eleven educational films on different subjects of infant care and development.

Conclusion

Some of the Loczy ideals, goals, and concepts relative to infant needs and caregiving may differ from those in this country. Acceptance of an ideal or goal does not require obedience to a methodology, however, and it is not suggested that the methods of Loczy should be, or even could be, duplicated in their entirety in the United States. Developed over thirty years in a controlled setting, the Loczy philosophy and principles do have implications for group infant care in this nation and do merit objective study and consideration.

In summary, the Loczy guidelines are:

1. Basic trust in the child as a self-learner and initiator.
2. An environment for the child that is physically safe, emotionally nurturing, and consistent.
3. Intimate human relation with one primary carer.
4. Concept-free observation of the child.
5. Minimal interruption of the child at play, with large amounts of time allotted to play.
6. Independence for the child in movement, choice, activities.
7. Involvement of the child in all activities with the carer.
8. Respect for all human beings, including infants.

These guidelines do not imply a permissive approach in which a child can do whatever he wants. Adults at Loczy give clear messages about their expectations for children's behavior and the limits which must be set to promote discipline. However, children are given choices whenever possible, especially in feeding and play situations. The child's ability to make decisions is fostered and respected.

Postscript

The work of the Loczy Institute and Janet Gonzales-Mena's article on the following pages, which is based on her experience in the Demonstration Infant Program in Palo Alto, California, are linked by a bridge. It is a bridge that spans space and time, stretching from Hungary to the United States over a period of three decades.

My personal awareness of the needs of infants began when my first daughter was born. I realized, with bewilderment, that none of my fine academic schooling had prepared me for the challenging new job of parenting. In order to learn how to cope, I began to read books and ask for advice, only to become more confused by the often conflicting suggestions. Three years later my second daughter was born. I had believed that my experiences with my first child would have ably prepared me for my second, but, alas, I found that she was a very different sort of child. I again became aware of how unsure I was of her needs and how to meet them.

It was three years later that, by chance, I met Dr. Emmi Pikler; she was substituting for our regular pediatrician. What an eye-opener that first visit was! It was a revelation for me to watch my unruly children listen, pay attention, and follow directions without any fuss or fear. Dr. Pikler usually began to work with new families only before or shortly after the birth of their child, but I managed to convince her to accept the care of my children, then three and six years old. It was at that point that my education in parenting began. Years later, when my son was born, I experienced the striking difference between my former feelings of doubt and anxiety and the new feelings of confidence in myself and empathy for my children. I decided to devote myself to the study of infants and their care in order to be able to help other parents.

In addition to my formal training, I became Dr. Pikler's apprentice. The main curriculum was observation. For years I observed hundreds of infants in homes, in parks, in institutions. After the war, in 1946, when Dr. Pikler founded the Loczy Institute for motherless infants, I participated with her in the training of people in a new profession: the "infant carer."

I arrived in the United States in 1957, hoping to continue working with infants and parents and training infant specialists. At the time, I was alone in seeing the need for such a program. I thus channeled my efforts in another direction, drawing upon my knowledge of infant behavior as an aid in my new occupation of therapist for emotionally disturbed children. Finally, in 1968, I was able to initiate the Pilot Infant Program at the Dubnoff Center in North Hollywood, California. This was a great opportunity and an enormous challenge, as there were no models to follow. I combined my training under Dr. Pikler with my newly-gained understanding of older children, and based the program, as had Dr. Pikler, on observation--the intensive observation of infant interaction with both adults and other infants.

This same design was again used and further refined at the Demonstration Infant Program in Palo Alto, which is described from the infant's point of view in the article which follows. From 1972 to 1977 the Demonstration Infant Program trained infant specialists. In 1978, building on the network of these infant professionals, Dr. Tom Forrest and I founded a non-profit organization, Resources for Infant Educarers. Resources for Infant Educarers continues to train people to improve the quality of infant care and to provide resources and support for parents and professionals. It is the last pillar of this bridge across time, space, and experience.

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QUALITY ADULT-CHILD RELATIONSHIPS: A CHILD'S-EYE VIEW

Janet Gonzalez-Mena

Infancy is a time when life-long patterns of behavior are established. If the infant can receive appropriate unhurried and undivided attention from his mother or "carer" during his daily routines, he will feel trust and security to freely explore his safe environment without needing intervention or stimulation from others. Thus, he will acquire self-confidence in his growing capacity to solve his own problems.[1]

You're moving down a long hall in your mother's arms. You come to an open door, pass through it at shoulder height, and find yourself in a familiar room. A quiet voice says your name and you look to the source. A short, white-haired woman with an energetic peacefulness about her looks you right in the eye and greets you.[2] You smile in return--you remember her from other visits.

You find yourself being carefully placed on a high, soft surface. Your mother's face appears above yours and says something like, "I'm going to take your shoes off." You look around the room until your mother brings your attention to your foot, which has the shoe untied and loosened. You pull at it a little and it topples off. You laugh at this. You hear something about "the other one" and turn to discover the other foot in the same condition. It's easy to pull this shoe off too.

You still have time to take things in while your mother talks a little to you and fiddles with your socks. Before you know it you find a sock ready to be removed by you--and then another. Done. You have a feeling of accomplishment!

Before long you realize that you have removed (or helped to remove) lots of restrictive things from your arms and legs. You feel air on your skin and lots of freedom. You're anxious to get off this high place and move. You wiggle around and find yourself carried down to the floor.

Now you're on a smooth, cool floor, sitting, staring into your mother's shins. Up you get on all fours and without giving much thought to where you are going, you take off. You quickly notice a change under your knees. The smooth hard feeling has become soft and spongy. You stop for a moment to stick your fingers into the nap of a thick rug, then keep right on going past the designs on the rug, past a brightly colored scarf. You're headed for a shelf of toys you can see ahead of you.

Whoops, what is that? A face comes into view--a very small face and a pair of hands. You stop for a moment to investigate. You regard this face quietly and at the same time feel a big presence come up close beside you. You ignore this adult and reach for the face. You touch the smooth skin, and the eyes come to rest on you. You feel good. You pat the soft hair, then have an urge to know what the hair will feel like on your lips. You reach down and touch your lips to the hair.

You feel some kind of pleasure coming from the adult sitting by you. You look up for a moment, but this big face isn't as appealing or as reachable as the small face on the floor by you. You move back to your examination of the face. Then you begin to get more energetic about your explorations and you feel a big hand stroking your small one, and you hear a voice saying, "Gently, gently." You go back to your original soft stroking. Suddenly a small hand comes up and attaches itself to your hair. You move back, startled.

This movement puts you in a new position, and from this new view you can see a big, bright ball. You move over to it. You reach out and touch it--it rolls away from you. You feel excited about this and crawl after it. You try to hold it, but it keeps getting away from you.

You stop for a moment and take your bearings. You're far from the rug now, and the toy shelf you were originally after has disappeared completely. You find instead that the ball has rolled to a small bed with a doll inside. You reach for the doll, pick it up by one foot, and drop it. You take the blankets off the bed one by one, comparing their soft textures. When you get down to the hard bare wood, you figure you've seen enough. You move on. As you pass by the doll you give a little attention

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[1]From a brochure on the Demonstration Infant Program, Children's Health Council, Palo Alto, CA, January 1975.

[2]Magda Gerber, Program Director.

to its face. You glance back to the small person on the rug and a fleeting glimpse of that face crosses your mind. It's different from this one. You compare the two.

Suddenly you remember your mother. You have a tight feeling inside. Where is she? You sit straight up and look around. Not far away is a familiar pair of shoes and feet and legs. You look up and up until you get to her face. Her familiar voice says, "Yes, I'm still here." You crawl over and touch her skirt. Then you take off again.

You are aware now and then that there are other voices in the room. They talk softly and infrequently. You notice too that there are other people in the room. As you are about to go in pursuit of new adventures, you hear a squabble coming from a far corner of the room. You give your attention to it for a moment, but it makes no sense to you. You move on. You see an open door and you move toward it. On the way you pass a mirror and catch a glimpse of a familiar face. It's you! You pause momentarily to reacquaint yourself with your features.

Then the open door beckons again. As you go out you feel a change of texture under your hands and knees. You find yourself faced with the choice of a gently sloping ramp or low steps. You choose the ramp. You feel a downward pull as you crawl forward. At the end you feel warm grass under your hands and knees. It tickles a little. You sit quietly for a few minutes taking in the new sensations. Then you crawl a short distance and find yourself sitting in warm sand. You enjoy running your fingers through this new material for awhile.

Someone else is in the sandbox and you are about to poke a fat, soft leg, when you suddenly remember your mother again. Up the ramp and through the door you go, and you find her close by. Beside her is the toy shelf you were originally aiming for. You turn to move toward the shelf when your mother says, "I'm going into the other room now." You sit up wondering. You watch as your mother's feet get up and start moving slowly away. A feeling of panic comes over you, but you remain stunned. You want to do something to stop her, but you can't. Her feet disappear out the door and you can't see them any more.

You feel a tenseness in your face and a pounding in your ears. You hear a loud noise and feel something come out of your throat. You're all alone in the world. You have just enough time to fully react to this feeling when a hand touches you and says, "Your mother's right in the other room." You stop for a moment to consider what that means. But your mother doesn't come, so you get the same feeling back and your cries come pouring forth. The warm voice says, "You can go see your mother if you want."

You stop crying, but then you start again because you're still stuck here without your mother, even though this other voice and hand are comforting. Then you see a big person, the one with the white hair, crawling in front of you, beckoning you to come. You begin to crawl and once you begin, you have a strong feeling. You can get to your mother! She isn't gone--she's reachable! You move with energy--out the door into the other room. There are those wonderful familiar feet! You crawl over to them, hugging the shins. Your mother comes down to you. She touches you gently and says quietly, "Here I am. You were upset because you couldn't find me."

You sit down together on the floor and you bask in her presence. But very shortly you get the urge to go back into the room with the toys and the white-haired woman. You move away from your mother and start back. You watch her from time to time, but she doesn't move. You move out of sight of her but have the feeling that you can get to her again.

As you pass back through the door you see a big, soft, floppy ball. You reach out for it and grab it in your hand. Just as you are about to enjoy it, you find it yanked from your grasp. You sit back in astonishment. You look up to find YOUR ball in the hands of another young person. You are surprised and disappointed at the same time. You reach for it--but the person moves away. You follow and reach again. You just get your finger tips on it when it suddenly is yanked away again. You sit back in tears. It feels as if you are going to cry for a very long time. You have just settled back to do that when a hand touches you and a voice says, "You don't like it when Kevin takes the ball." Such understanding is conveyed by that voice that your feeling about having a long cry changes. Now that you have shared your feeling you don't have to hang onto it. You cry a few more sobs, look at the face, and let go of the feeling.

You move away toward a low table. As you come up to the table you see the underside first. The paint is missing here and there and the textures are interesting. You wonder what is on top. You pull yourself up to have a look. There is a puzzle. Kevin is just removing two pieces. You push the puzzle with your hand and it falls on the floor with a great big delightful noise. Kevin looks at the puzzle, then at you. You take the piece he has in his hand. He looks surprised. You pick up a piece on the floor and begin to bang the two together. You feel Kevin wants to take the piece back, but he makes no move to do so. He leaves you in peace and you shove the puzzle under the table and then follow it. You turn on your back and contemplate the textures of the unpainted side of the table. A feeling of real peace comes over you and you spend a

long time here.

When you're ready you crawl out and look around. You spy Kevin again. He is climbing on a low platform. You find that interesting and start over in his direction. By the time you get there the platform is empty. You want very much to get up on it, but you don't know how. You make several attempts to crawl up, but it is just a little bit too high. You are just about to give up when a voice says, "Maybe a cushion will make it easier for you." A flat, firm cushion appears in front of you--between you and the platform. You sit back to think this over--but only for a minute. You climb up on the cushion and from there you can easily get onto the platform.

What a great feeling to be up there! You take only a moment to let it sink in and then crawl back down. You want to try to get up there again. You manage the climb again and get the same feeling. You repeat this sequence a number of times until the pleasure of it all begins to wear off.

You're just beginning to wonder whether you should stop or not when you become aware of some fussing noises in another part of the room. You stop to take in what is happening there. An adult is talking to a fussy baby. You hear the word "juice." That reminds you of a little feeling that you've been having down inside. You look over to where you remember the snack cupboard is. Sure enough, there is the white-haired woman helping a small person wheel the snack cupboard over to the table you were lying under earlier.

You get very excited and you start for the table. But you forgot you were on the little platform. You miss the cushion completely and find yourself sprawled on the floor. You're surprised and upset. You let out a loud series of cries. You have your eyes closed so you don't see an adult come to your side. Instead you feel a calming presence. You open your eyes and hear a voice say, "You fell down." You lie there a moment, gathering together your scattered feelings before you attempt to pick up your scattered body. The adult waits. You wait. The adult says, "Do you need some help?" You take a quick inventory, move an arm, shake your leg, and discover all your parts still work. You pull yourself together, rejecting the offer of help.

An image of your mother flashes across your mind and you think for a moment you might need her very much right in the next instant. But the table and juice come to your mind and you remember what is to come. You continue on your way, vaguely aware of a little sensation in your leg that wasn't there before, as well as a slight throbbing in one cheek. As you get to the table you feel (or perhaps hear) a welcome. You get into a waiting chair by yourself and sit back to see what will happen next...

This child is experiencing an infant-toddler-parent program[3] which is notable for several reasons. The pace is an infant one, not an adult one. Things happen slowly, giving the child plenty of time to grasp not only what is happening but what is going to happen. The sounds are primarily child sounds rather than continual adult chatter. The adult talk is quality talk and is usually in response to the child. Talk does not interfere with concentration or direct experience. The child is able to get really involved in something without being interrupted.

The child is encouraged to do things for herself, rather than just having things done to her. When shoes, socks, and clothes are removed, the adult involves the child in the process rather than just getting the job done.

The child is given a variety of choices and encouraged to play and explore using his senses. He is never entertained.

Recognition is given for feelings. Instead of trying to "make the feeling go away," the adult expresses in words the discomfort felt, such as when the child felt abandoned and when she fell and got hurt. This encourages the child to recognize feelings instead of deny them. It also tells the child that she was heard, which is comforting. The child is encouraged to tune in on her emotions and to learn problem-solving skills. (Compare this to teaching a child to deny his feelings by distracting him. The implications for denying feelings in adulthood are complex. Better to develop awareness rather than denial from the beginning.)

The adult role in infant problem-solving was illustrated in this scene. Children are left alone to solve their own problems. However, when the adult perceives that the child needs just the smallest bit of help to move forward, that help is provided. The child climbing up on the platform needed more than was available; she would have given up if the cushion hadn't been supplied.

The scene just described shows mostly child-directed time (free play). Not all

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[3]The Demonstration Infant Program, Magda Gerber and Tom Forrest, M.D., Directors. The program was based on the principles developed at Loczy. It was designed to meet children's and families' needs and to train professionals to work with infants.

time in the program is child-directed. The following scene shows an adult-directed time--snack time. The children are not free to do whatever they want at the snack table. Choices are available, but there are restrictions too. Eating is done only at the table, not while playing. Food is available to be explored with the senses, but eating time is not play time. If a child prefers to play, he is directed away from the table or actually put down.

Three toddlers are sitting at a low table, intently involved in watching a man[4] who has several plastic cups in his hand. Across from the man is a woman with an infant in her arms.

Tom: (To the child on his right.) *Susan, do you want this cup* (holds out a small blue cup without a handle) *or this one* (offers a slightly larger green one with a handle)*?*

Susan: (Regards both carefully.) *Uh...* (Reaches for the blue one.) *Now, everyone has a cup. We're ready for the juice.* (Brings out a can of apple juice.) *See the can of juice.* (Takes his time so each child has plenty of chance to realize what is happening. Notices one child is getting particularly excited.) *Ricky, you're ready for your juice.*

Ricky: (Pounds his cup on the table.) *Me!* (Reaches cup out to Tom.)

Tom: *Yes, you want your juice. We have to open the can first!* (Gets out the can opener, taps the top of the can, punctures the lid. Then, still moving slowly, aware that all eyes are on him, he pours a little juice into a small pitcher and hands it to Ricky.)

Ricky grabs the pitcher and pours with great excitement, missing his cup.

Tom: (Hands him a small sponge.) *Here's a sponge for the spill.*

Ricky: (Pays little attention to the sponge, which finds its way to the spill and lies there sopping up the liquid. Pours again--this time more carefully--the small amount of juice left in the pitcher.) *Umm. Me.* (Abandons the pitcher and concentrates on the cup.)

Tom: *Kim, you're ready for your juice.* (Fills the pitcher again and passes it to her.)

Kim: (Takes pitcher, pours some, then shoves it toward the mother and baby at the table.) *Baby want juice too.*

Tom: *You want Andrea to have some juice.* (Watches as the mother pours a small amount of juice into the waiting glass, and holds it to her child's lips. An interruption causes everyone's attention to shift to the child at the table who has not yet been served.) *Greg, you want to tell us something.*

Greg: (Bangs cup shouting) *Me! Me!*

Tom: *You want your juice.*

Greg: *No! Me no juice.*

Tom: *Maybe you're ready for some fruit.* (Gets a small basket with an apple and a banana in it.)

Greg: *No!*

Tom: *You don't want fruit and you don't want juice.*

Greg: *Me!* (Points beyond Tom to the low cupboard containing the food and eating equipment.)

Tom: *You want something in the cupboard.*

Greg: *My...ummm.*

Tom: (Notices a jar of raisins in view.) *You want some raisins?*

Greg: *UMMM. UMMM!*

Tom gets the raisins, puts them in a small plastic dish, and offers them to Greg. Greg grabs two handfuls and looks delighted.

Susan: *Nanana. Nanana.*

Tom: *You are ready for some banana.* (Brings out the banana for closer inspection by the children.) *We have to take off the peel.* (Lets each child feel the peel.) *The banana is inside.* (Slowly, and with the full attention of each child, he pulls off the peel.)

Susan squeals with delight.

Tom: *Are you ready for a piece, Susan?* (Offers her a piece of banana.)

Susan takes the banana and squishes it in her fingers, and then with obvious enjoyment licks each finger.

Ricky: *Me!* (Takes the bite offered him, stuffs it all in his mouth, and holds out his hand for more.)

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[4]Tom Forrest, Program Director.

Notice that the caregiver is dedicated to the idea that a child learns a good deal from examining and exploring the food he eats. He encourages each child to touch, smell, notice the food--the form it comes in, the way it changes, the parts of which it is made.

In a program designed especially for babies, slow pace, encouragement of independence, and recognition of feelings can be built in on an ongoing basis. Homes and families, on the other hand, are not designed just for babies. But many parent-child interactions will be more mutually satisfying if carried out with this sort of respect for the child.

Diapering, for example, is often a brisk process that does not involve the child's attention. The mother decides that the baby needs changing. She walks up behind the baby without saying anything, reaches down and picks him up, and carries him to the diapering table. He objects a bit, so she reaches up and turns on a music box mobile hanging above the table. Then, just for extra insurance, she gives him a squeaky rubber dog to hold in his hand. She quickly and efficiently removes the wet diaper, disposes of it, rubs on some powder, puts on a clean diaper, and puts the child back down on the floor, saying, "There we go--all done."

But diapering, like other routines, can be used as an opportunity for respectful, synchronous interaction. A synchronous relationship is one that is built on sensitive give-and-take; it is responsive and reciprocal.

In this scene a very contented but very wet infant is playing on the floor alone. A step is heard and the baby's eyes travel in the direction of the sound. The door opens and the mother enters.

Mother: *Hello, Jennifer. I'm wondering how you're getting along.*
Jennifer smiles and makes a cooing noise. Mother responds, then notices the dampness of her clothing.
Mother: *Oh, Jennifer. You need a change.*
Jennifer smiles and coos.
Mother: *I'm going to pick you up now.* (Reaches out.)
Jennifer responds ever so slightly, continuing to smile and coo.
Mother carries her to a changing table in the corner of the room.
Jennifer reaches for a toy as she goes by the dresser.
Mother: *Yes, you can play with that in a minute. First I'm going to change your diaper.*
Jennifer lies on the changing table, but looks elsewhere.
Mother: (Removes the pins in the diaper.) *Look, Jennifer, I'm taking the pins out.* (Shows them to Jennifer.)
Jennifer starts to squirm and fuss a bit.
Mother: *Now I'm taking off the wet diaper. See how wet it is, Jennifer. I'll put it in the bucket.* (Disposes of diaper.)
Jennifer squirms to watch.
Mother: *Now the powder. See the powder box, Jen.*
Jennifer gets distracted, then comes back to touch the powder box.
Mother: *Now I'm going to put the powder on.*
Jennifer gets distracted by an obvious noise in the hall.
Mother: (Waits, touches her.) *Open your legs, Jennifer.*
Jennifer brings her attention back to mother.
Mother: (Puts the powder on.) *Now, here's the clean diaper. Feel the clean one, Jennifer.* (Hands it to her.)
Jennifer reaches for the diaper just as a voice calls from the hall.
Voice: *Nommy! I finished the puzzle. Come look at it.*
Mother: *I can't right now, Jeff. I'm changing Jennifer. I'll be with you when I'm finished.* (Turns back to Jennifer and gives her the diaper.)
Jennifer puts the diaper on her face, pulls it off, laughs.
Mother responds, enjoying Jennifer's pleasure.
Jennifer begins to squirm and tries to roll over.
Mother: *We're not finished yet. Here's where the diaper goes--right on your bottom.* (Pats her bottom and brings her back to the task.) *Now for the pins.*
Jennifer twists to watch mother put the pins in.
Mother: (Smiles at her efforts.) *That's right, Jennifer. We pin the pins in like this.*
Jennifer starts to squirm again.
Mother: *Almost finished. Just the snaps left.*
Jennifer twists again to watch mother fasten the snaps.
Mother: *That's it--we're finished.* (Reaches to pick her up.) *Want to come up?*
Jennifer reaches out and sticks her fingers in her mother's mouth.
Mother: (Blows on her fingers.) *Brrrrrrrrr.* (Smiles.)
Jennifer smiles back.
Mother picks Jennifer up in her arms and gives her a hug. (Gonzalez-Mena, 1979, pp. 47-48)

Synchronous interactions are not always happy and peaceful. There comes a time in every baby's life when she resists diapering fiercely. Resistance shows the child is developing autonomy--seeing herself as an independent person, not to be told what to do.

In a small home, the corner of one room is set up for the baby who is occupying it right now. He is playing contentedly with an empty can and a wooden spoon. The baby sees a pair of feet and legs approach. He looks up as his mother's voice reaches him.

Mother: *How are you doing, LeRoy?* (Sniffs.) *Hmmmmm. Do I smell something?*
LeRoy: (Turns his back.) *NO!*
Mother: *LeRoy, I think you have a dirty diaper.*
LeRoy: *No!*
Mother: *Oh, LeRoy, I know you don't want to be changed--but look, you're making a mess on the floor. I'm sorry, but I have to change you now. I'm going to pick you up.* (Holds out her hands.)
LeRoy puts up a fuss.
Mother picks him up, firmly but calmly.
LeRoy continues to resist.
Mother: *You really don't want me to change you.*
LeRoy squirms and tries to get away.
Mother: (Holds him firmly.) *I'm sorry, but you just have to put up with this. Let's get these dirty pants off.* (Waits for the smallest hint of cooperation, which LeRoy reluctantly gives.) *There--see the pants are dirty--they go here.* (Indicates bucket.)
LeRoy looks momentarily at the bucket below and begins to squirm around in the other direction.
Mother: *Now the pins, LeRoy.*
LeRoy pays no attention, squirms and tries to stand up.
Mother: *I know you want to stand up, but you have to wait just a minute. See, I'm putting the diaper in the bucket now.*
LeRoy ignores her.
Mother: *Some nice water to clean you, LeRoy.* (Shows him a pitcher and pours water into a bowl standing at the end of the changing table.)
LeRoy shows a spark of interest.
Mother: *Want to touch the water?*
LeRoy: *No!* (Squirms away, but looks back as a wet washcloth is presented to him.)
Mother: *This is the wet washcloth.*
LeRoy grabs it, examines it briefly, and puts it in his other hand, getting ready to fling it back at his mother.
Mother: (Takes it gently.) *I'm going to clean your bottom.*
LeRoy struggles and gives his mother a bad time.
Mother: (Puts diaper and pins in as quickly as she can, under the circumstances.) *There we go, LeRoy.*
LeRoy sees that he is finished and holds up his arms to be taken down.
Mother: *Are you ready to get down?* (Puts him on the floor.)
LeRoy, relaxed and happy now, goes back to playing with the can and wooden spoon, as if nothing had happened.

LeRoy's mother, like Jennifer's, involved the child in the process. First she told him what was going to happen and gave him time to respond. Parent and child both were totally involved in the process--fully present. Neither was distracted by other things. The talk was about the process; it was not intended to distract the child. The child was treated with respect as a human being, not as something to be manipulated.

Feeding is another frequent routine in which a synchronous relationship can be built. This time, the example is a very young baby. Try putting yourself in this baby's body to get the most out of the scene.

Feel yourself held lovingly in warm arms in an upright position. Hear a familiar voice say to you, "Here's some applesauce for you." Look around and see a spoon, a hand, and beyond it a small dish of applesauce. Take time to really perceive all this. Feel the comfort and warmth as well as the anticipation. Hear the same voice say, "Are you ready?" See the spoon come up to your face. There is plenty of time for you to open your mouth for the bite.

You feel the applesauce in your mouth. You taste it. You notice the texture and the temperature. You thoroughly explore this bite. You swallow. Some goes down your throat, some runs down your chin.

You look up to find the familiar face. Seeing the face adds to your pleasure. You

open your mouth again. You feel a scraping on your chin. The next bite comes into your mouth. You explore it. You compare it to the first bite. You take your time and get the most out of this bite before you swallow it. When you swallow you get an excited feeling--an anticipation of the next bite.

You look at the face again. You reach out and touch--your fingers close around something soft and smooth. All of these feelings are present as you open your mouth for the next bite.

This scene contrasts with one in which the same baby is fed hurriedly, without synchrony. Imagine the difference if you suddenly feel a spoon between your lips, forcing them open with no warning of what is going to happen. You barely have time to taste the applesauce, let alone wiggle it around in your mouth, when the next bite comes--spoon between your lips, forcing them open. While you're still trying to enjoy what is in your mouth, you feel scrape, scrape on your chin, and more applesauce comes into your mouth. You swallow a little of the big load and get ready to swallow more, but before you can, the spoon finds its way in again. You sense a bit of urgency to get this down before the next load. You try to hurry, which slows you down. More applesauce squishes out and runs down your chin...

Feeding should often involve choices--for example, offering a choice of an apple or an orange to a child old enough to indicate and eat fresh fruit. Then it's a matter of respecting his choice of fruit or his wish to decline. For the younger infant, it's a matter of paying attention to how he responds to what you put in his mouth, avoiding forcing, games, or coaxing. When a baby occasionally refuses to eat his squash or goes overboard on cereal, he knows what he is doing. He doesn't need to be forced to do otherwise.

Many times, of course, children are too tired to make choices, or adults are too tired or pressured to offer them, or a choice is inappropriate in the situation. This approach is the approximation of an ideal, not an unvarying prescription for consistency.

Quality Time

Quality time is the kind of time that lovers give to each other or that people buy from a psychotherapist. The term means that each person is fully present with the other, giving full attention, responding. Giving of one's time in this way is giving of one's self--which is the ultimate gift.

Each baby needs quality time with another person. When the baby's needs for that kind of time are met, she will not give parents the problems that babies can give when they continually demand attention. The amount of quality time each person needs varies. Perhaps the amount isn't as important as the consistency--knowing that one will continue to get periods of undivided attention from someone. Quality time can be planned to happen during the essential routines of diaper-changing and feeding. Or, a working parent can plan an hour of quality time with a baby in the evening before bedtime. This kind of quality time can be child-directed play time, rather than adult-directed caregiving tasks.

An interesting aspect of quality time is that a little goes a long way. No one needs, or could stand, quality time most of the time. Just as each baby needs quality time, so each baby needs private time--time and space alone. (Mother's needs for private time are well known; baby's are not so publicized.) When parent and baby are never separated, they create private time by drifting off--by not paying attention, by being elsewhere mentally, if not physically. This attitude becomes a habit, so that constant time together tends to become time in which one is only "half there." However, a great deal of "half-there" time doesn't equal even a small amount of "all-there" time.

Problem-Solving

There has been much talk recently about infant education and infant stimulation. Many parents must wonder if these are things they can do themselves, or if they have to send their infants off to "school." I have been describing an approach to infant education which focuses on problem-solving, not stimulation. Stimulation means something that comes from the outside, something that is done to the baby. The baby may have no choice in the matter except to withdraw or tune out. What is needed, rather, is for the baby to see that he has power to influence the people and things around him.

Think of the number and kinds of problems a baby is faced with every day. The variety is enormous. She faces physical problems like hunger or discomfort, manipulative ones like how to get a toy from one hand to the other, emotional ones like getting someone to pay attention to her, and many more. She needs to learn to deal with a wide range of problems, developing patterns of attack and withdrawal, and eventually coming to see herself as a competent solver of problems. Problems may come from inside oneself,

or they may result from interactions with the environment, which includes both objects and people.

Take a look at an example of a toddler who has a problem, and how his father responds to him in ways that help him deal with his problem (as well as educate him).

Jason toddles in, crying loudly, holding his fingers out in front of him. His father says, "Oh, Jason, something happened to you." Jason continues to cry and holds his fingers up for inspection. His father touches his fingers gently, saying, "It looks like you hurt your fingers." There is no upset in his voice. His tone is soothing and calm.

Jason reaches with his other hand, grabs his father's pants and starts tugging. "You want me to come with you," says his father. Dad is led into the other room to a cupboard with the door standing ajar. Jason's cries have changed from pain and sorrow to anger now. "Did you pinch your fingers in the door?" asks his father.

Jason is very angry now, and he picks up a toy hammer and gets ready to throw it at the cupboard door. His father holds his arm firmly and says calmly, "I know you're mad, but I won't let you throw the hammer. You might hurt something."

Reconsidering, Jason puts down the hammer and goes to the cupboard. Still crying, he closes the door and opens it again. He is very careful in his actions. "Yes," says his father, "now you can do it without pinching." Jason ignores him and continues to open and close the door. The angry cries subside and a pained whimpering takes their place. He sits down by the cupboard and remains there crying. Bending over his son, arms outstretched, Jason's father says, "Let's go put some cold water on your fingers."

In this scene, Jason had a problem--a door that pinches fingers, plus the pain of learning that. He went to his father, who provided understanding, acceptance of his feelings, and support. Although his father did not teach him, Jason "learned his lesson." He not only discovered that skill is needed to keep fingers out of doors, but he also went back to the scene of the lesson and did some practicing. When he had finished dealing with the feelings and skills involved in this problem-solving situation (which he attacked head-on), he was ready for some comfort for his pain. Think about how different this scene would have been in terms of problem-solving skills if father had reached down, picked up his crying son, kissed his fingers, and carted him off to the bathroom, telling him not to cry.

Another example of learning problem-solving behavior comes up in the following situation.

Twin girls are tugging at a rag doll. The doll's arms are stretched almost to the point of tearing, when one child reaches out and slaps the other. A wail goes up and mother arrives quickly on the scene. She kneels down beside the two babies. Her face is calm, her movements are slow and careful. She reaches out and touches the child who did the hitting, saying, "Gently, Kim, gently." She rubs Kim's arm in the same spot where the other child was hit. Kim looks angry but remains silent.

Then mother turns to the other child and touches her gently on the same spot. "You got hit, didn't you, Karen? That hurt!" Karen stops crying in response to the touch and soothing voice. Mother remains quietly waiting to see what will happen next, saying, "You both want the same doll."

Karen clutches the doll and starts away with it. Kim reaches out and grabs the doll. Instead of interfering at this point, mother waits. When Kim reaches out to hit again, her mother stops her arm mid-air, saying, "Gently, gently, Kim." Touching her softly, she adds, "I can't let you hurt Karen."

Kim jerks the doll and Karen lets go unexpectedly. Taking the doll in triumph, Kim starts off across the room. Karen looks sad but remains in the same spot. Mother stays near but doesn't do or say anything.

Kim sees a ball on the other side of the room. She drops the doll and goes after the ball. Karen comes up quietly and takes the doll, holds her in her arms, and coos at her. The scene ends with both children playing contentedly, and mother is no longer needed immediately on the spot.

Teaching children to share is an ultimate goal of most parents. However, these two toddlers are not old enough to grasp the concept. The reality for them is that each wants the same toy very badly and the problem is how to get it. Their mother, arriving on the scene and helping them work through the slap, then helped them work on this problem by staying near and keeping the experience safe for both. Only because both aggressor's and victim's fears about losing control were taken care of could this become a positive problem-solving situation. Both children needed the assurance that mother would

stand by and not let things get out of hand.

Notice how the mother modeled the behavior she wished to teach the girls. How often does an adult arrive on the scene of aggression and treat the children with even more aggression than they have been displaying themselves? ("I'll teach you to hit," says the adult. SPANK, SPANK, SPANK.) (Gonzales-Mena, 1979, pp. 51-52)

Only by trying to go inside a child's head can we know the extent to which he is problem-solving. From the outside we can only guess at the problems he is dealing with; however, our guesses become more informed as we pay close attention and become alert to subtle cues. As long as we remind ourselves that our interpretations of a child's experience can never be more than approximations, then I believe this process of "going inside" can sharpen our imaginations and our understanding of a child's world.

As a final exercise, take one more look inside the heads of two babies. Notice how different are the problems each chooses to deal with, the style of approach of each, and the similarities as well.

Focus first on Bruce, a healthy-looking boy with a medium build. He has padded cheeks and tummy, and is about ten months old. He is sitting right now quietly in the living room of a small apartment. The door is open and a gentle breeze comes in through the screen. Although there are toys around him, Bruce is involved with a piece of paper that keeps lifting gently off the rug and settling back down. Here is the monologue that might be running through his head if he could talk.

There goes that paper again. First the corner near me goes up in the air, then the one on the other side. Each time that happens I feel a puff of air on my arm, leg, and cheek, but only on one side. How interesting! There it goes again. I wonder what will happen if I turn the paper around. There!

Oh--it moves differently now. I still feel the same puff on me, but the paper doesn't act the same. That's interesting!

Oh yes--another interesting thing is that shadow moving on the wall. I don't know what it is or what makes it, but I see that its movements are something like the ones of the paper. It doesn't look like the paper at all, but I feel some kind of sameness about it. I like to look at it. It keeps changing. I like to look at the shadow, then at the paper and feel the air on my skin at the same time.

I'm also noticing some nice smells--one is coming in on the air. The others are coming from the kitchen. I feel good about those smells. When I think about it, I realize I am also hearing several noises. There is a faint flapping sound that goes along with the air. And best of all, there is a sound I love--my mother's voice talking in the kitchen. She isn't talking to me, but I like to hear that sound anyway. In fact, I think I'll go watch her awhile.

Bruce moves slowly on his hands and knees to the door of the kitchen, where he settles back into a comfortable sitting position. He is so unobtrusive that no one notices he is there. The scene ends with Bruce contentedly watching the action in the kitchen with much interest and emotional involvement.

The next scene starts in another living room. It is empty of people, though some toys are scattered here and there. A sound comes from beyond a doorway. Bump, bump, bump. Into view comes Bret, sturdy and strong, crawling at a fast pace. Dragging along behind him, upside-down, is a little wagon caught by its string to one of his legs. Bret pauses for a moment, shoves at the wagon, kicks his leg free, and continues forward. Here is the monologue going on inside him.

That's better. It was hard to move with that thing on my leg. Now I need something to put in that thing. Let's see what's here! Oh, there's a ball right over there--I'll just whip over and get it. Here we are! I wonder if I can get it in the wagon from here. Might as well try.

Oooops--missed! I'll just crawl over and get it. These other toys are right in my way--I'll just shove them over so I can get through. Here's the ball now. I'll just crawl back to the wagon and put it in. It's a little harder to crawl with the ball in my hand.

Nevermind--skip the crawling--I'd rather get up on that chair. Oh, it's really hard to pull myself up with this ball in my hand--but that's okay. I'll put it down when I get on top--no, I won't, I'll throw it when I get on top. There, I'm up. That's it--might as well get down.

Hey, where's my mommy? I'd like to crawl up on her right now. I'll listen a minute and see if I can figure out where she is. Oh, nevermind--I'll just go look. I can use the exercise anyway. Oh, it's hard to get down--might as well get rid of this ball. Look how it bounces when I drop it. There it goes--goodbye, ball!

Well, I'm down--now all I have to do is find Mommy. There's that wagon again--might as well shove it out of the way.

Bret goes out of the living room into the kitchen, where he goes straight to his mother, who is sitting on a stool. He grabs her leg and makes his way up like a monkey, almost before she can offer to help. She puts her arms around him and starts to settle him on her lap. Before she can finish, he is already on his way back down to the floor. As we leave the scene Bret is heading out another door, off for more adventures.

Summary

People who care for children, both at home and in other settings, can learn most from them and teach them most effectively by looking on them with the same kind of respect that they would give another adult. Infant education, in this view, comes from the quality of relationships and daily caregiving routines, rather than from "stimulation," teaching sessions, or "educational" toys. The speed with which an infant masters each developmental task is of secondary concern. The primary concern is how well the child can do what he is doing, not how fast he can move on to the next milestone.

These principles sum up this approach:

Ten Principles for a Synchronous Relationship With a Young Child

1. Involve the child in things that concern him/her.
   Don't work around or distract the child to get the job done faster.

2. Invest in quality time, when you are totally available to the infant.
   Don't settle for constant time together when you are only "half there."

3. Learn the baby's system of communication and teach him/her yours.
   Don't underestimate his/her ability to communicate.

4. Invest in time and energy to build a total person.
   Don't strive just to "make the baby smart."

5. Respect the baby as an individual.
   Don't treat him/her as a cute, empty-headed doll to be manipulated.

6. Be honest about your feelings.
   Don't pretend to feel something that you don't.

7. Model the behavior you want to teach.
   Don't preach.

8. Let the baby learn to solve his/her own problems.
   Don't take away valuable learning opportunities.

9. Build security by being trustworthy.
   Don't teach distrust by being undependable.

10. Strive for quality development in each stage.
    Don't rush the baby to reach developmental milestones. (Gonzalez-Mena, 1979, p. 53)

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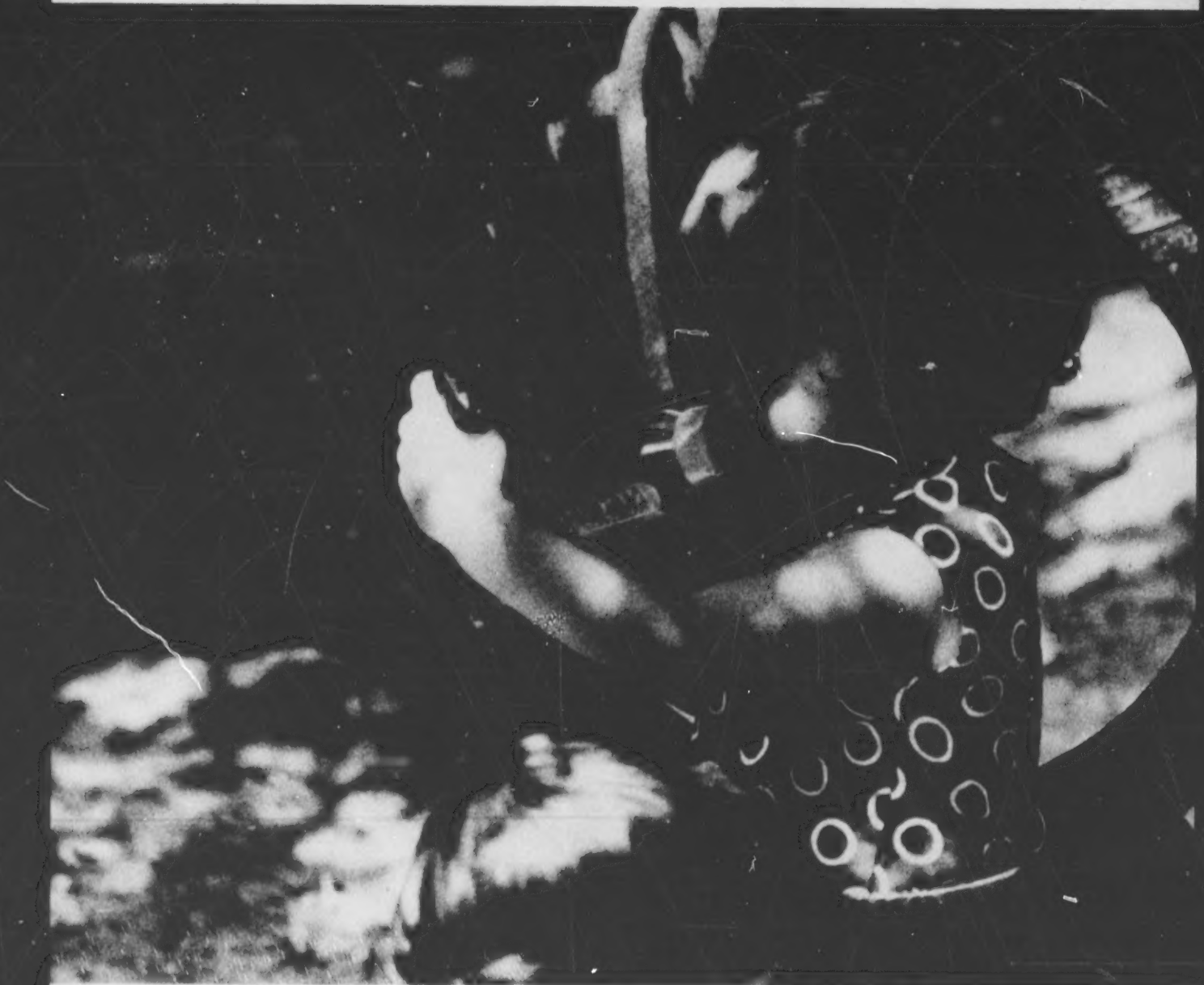


HANGING OUT WITH BABIES AT PLAY: VIGNETTES FROM A PARTICIPANT-OBSERVER

Mary Jane Tonge

I feel a convulsive little shudder go through Clara's small body. The sensation runs all through my body as I hold her in my arms. The shudder is a familiar experience for us and also a sign she is through crying. Clara cries with her whole heart, face all tense and great drops of water from her eyes and nose. Mother is off to work and Clara has expressed her grief at being left. Now she is ready to play.

I sit on the warm cement at the edge of the sand pile with Clara in the circle of my legs. The sun is shining through the leaves of the pepper trees, making a gentle moving shadow pattern on the cement, on the yellow table, on the pop-up push toy, on Clara's straight, shiny brown hair.

Clara turns on my lap. Into her big bright blue teary eyes comes a sparkle, and then the coy little smile I know so well. I feel a deep warmth from inside my body permeate out into our circle. My smile and the touch of my eyes are a part of the warm, soft experience. Now Clara is up on her feet, one hand holding an orange chair seat to steady herself, the other on the red knob of the push toy. Clara sways forward with her hand, arm, leg, and trunk as she pushes the toy, which looks like a little lawnmower. The toy goes pop, pop. Clara grins, sways back, then forward. Again the toy pops and pops--oops, too far forward. Clara loses the toy stick knob and finds her balance with the hand on the orange chair.

This is Clara's first experience pushing the toy from a standing position. She was one year old last week. She has taken a few steps alone, but until now had played with the push pop toy only from a squat as she crawled about the yard. Now Clara's joy is in balancing her body for walking. The toy is gone from awareness. She reaches for the low yellow table and walks all around it, patting the top with her hands as she goes, moving slowly now.

Then Carrie, who is two years old, quickly appears from the sand pile with two little dishes of sand. She says from the corner of her bottle-filled mouth, "One for you, Clara, and one for Mary Jane." She disappears. With a soft finger, Clara touches a blue dish, then the sand inside it. I pour some sand from a dish I have out on the table. Clara puts her hand in my pile of sand, then in her dish, moving both hands into the blue dish. Sand goes in all directions. Clara goes off balance and plops into a sitting position beside the table. She reaches for the orange chair, her face intent, pulls up to the yellow table, and goes back to touching the sand. She walks and touches a long time with great concentration. I can feel my own attention and focus on Clara, and I sense she is aware of this focus even though we are not outwardly acknowledging our play together.

I feel inside a gentle satisfaction and peacefulness. The other children and adults in the yard are a bright hum. Right now I am playing and Clara is playing.

Resistance to Play

I look around the infant room. I see Casey and Carlie playing on the floor. At the same time I feel Brian hanging onto my leg as I wash dishes. His touch isn't the light, exploring investigation of finding out what legs are like, but a heavy cling. I look down into big, soft brown eyes that say, "I want." Brian's arms reach toward me and he says, "Up." I say, "I'm washing dishes now." He slowly, glumly moves over to the gate and leans on it. His eyes are down with no focus.

Casey, six months old, is scooting along the floor, stretching and pulling his body in front of where Brian stands listlessly. Three other non-walkers are making their way about the room, touching, tasting, and feeling. Carlie, who is two, comes in the room, says, "Mary Jane" in a loud sing-song voice, stepping around Casey. She stoops and touches Casey's head softly; she rolls to her belly and looks at his face, as Casey grins. Carlie touches his blue bootie, then her own brown shoes. She says, "white shoes." Carlie is inviting Casey to play the shoe game. All fall we played a song, "Carlie wore her white shoes, her white shoes." Carlie is playing with Casey.

I look over at Brian again. He was supposed to have graduated to the Toddler Group next door, because he is almost two. He walks to the snack corner and fusses with the door lock. He seems not to see the other children in the room or the clusters of toys. At snack time he just fiddles with his rice and cheese on the babies' oilcloth picnic-style table. He is the only one who can hold a spoon as he sits among the new creepers who have rice and grated cheese flying as they explore and taste the snacks all around him. The Toddler Group was outside around the table this morning. Often since Septem-

ber Brian has eaten at the outside toddler table, but not today.

Brian is definitely not playing. The usual bright grin is gone, as is his stream of very clearly pronounced words. I'm waiting for the mood to pass, for something to catch his interest, his response; but the more stimulation he gets, the more withdrawn he is. Brian is an old-timer and I expect him to be comfortable and play. He has many resources for playfulness. But today he is resistant.

It is obvious to me that Carlie and Casey are playing and Brian is not. The difference between the two states is not a matter of a particular action or lack of action. For instance, Owen often plays by hanging out all morning with his "blanky," just kind of watching. He is doing his own brand of play, very comfortable and flowing. In contrast, Brian's "hanging out" this morning doesn't feel good; the quality and texture of his responses are flat and rough, not soft and bright.

As I watch the flow of play in children I see many frustrations, and the direction of the action changes rapidly and repeatedly. Alicia, fifteen months, picks up a large red plastic rod and a blue spool. She attempts to put the rod into the spool hole. It won't go, so she pounds the spool with the rod, delighted with her play. There is hardly a pause between her change of intention from threading to pounding. The play flow is one long series of "attempt--can't make it--so change it" actions. Then sometimes there is a long block between "can't make it," and "so change it." Such a play block can last a minute or two while the child runs off or yowls a bit. It can last a day or two while the child acts out a variety of not-playing actions. Sometimes a child can get caught in an habitual ritual of repeatedly not being in the flow of his or her own life. This may last for months or even years. A child who does something like sit by the gate, intermittently crying and sucking his/her finger, for at least half of the time at the infant center, is not a playing child. Play is happening when one is allowing and accepting and responding to whatever is going on inside and outside oneself. There is a sprinkling of appreciation, vigor, and enjoyment in the action. Play encompasses almost all feelings and almost any action.

The resistance to play, by contrast, is the discarding and rejecting of the environment, toys, and people. Even the senses are dulled, the appetite gone, unselective, or compulsive. The child seems to hold onto the past, expecting what has been, with fear and anger or dull silence. For instance, Brian expected me to hold him as I used to, not those new babies. Within the person there is a fight, a conflict between what is wanted and what is available. The demands are not being fulfilled by the present existing inner and/or outer resources. So the child's responses that can flow in a rainbow of personality qualities are absent.

Sometimes children's bodies hurt, and this of course blocks play. Last Thanksgiving, Nathan, two years old, was grinding onions at the snack table for the stuffing. He loved turning the big handle of his meat grinder and having Mickey stuff the chunks of onion in the hole. Both boys rubbed eyes, tears rolling down, as we stood by with cold, wet paper towels. I picked Nathan up to rinse onion juice off his hands and face. He howled at being separated from his play.

Carol, one of our pregnant volunteers, and Jenny walked out of the yard hand in hand to go see the new baby rabbits. Jenny put her little pointer finger through the small mesh of the baby rabbit cage, and the baby rabbit took a bite. Jenny howled in pain. We all ran every which way, mopping blood and applying pressure. We all stopped playing.

Not only do we have rabbits that bite, but we also have Tammy who bites. Tammy is just two and she loves Bethany, seventeen months, so much that she often, before we can catch her, takes a bite of her cheek along with a kiss and a hug. Bethany is a great explorer and player--all over the yard with great concentration. Now, when she sees Tammy she is in my lap in an instant, holding on, her face pouting.

I want to move quietly to transcend the things that block a child's play, rather than to stay stuck in dramatizint the child's resistance to play. The transcendence seems to have to do with making a new choice that feels good--a choice that gives the child what s/he wants in a new way. I can facilitate such choices when I provide for myself and others an abundance of appropriate resources--games that fit my stage of living, my development now, the child's development now. I want to make games and playroom environments that fit persons living and growing. Young children do not have a developed will which can enable them to think up resources to release them from resistance to play. They need help from adults to provide appropriate choices when they are stuck in blocks to the flow of play. The child is the expert at play, but the adult must understand the nature of play resistance.

Meanings in Play

The child takes a step in his/her developmental process as s/he plays. This is the profound meaning of play. Play is individual for each child and fits his/her unique pattern. Play is not just fun; it is the living of life in a fully genuine way. It is the action, the happening, the quality of living I experience in children.

Adults cannot know the meaning before it evolves within the child's play. The play brings forth the birth of new qualities in the child. The child is growing him/herself through play. Adults can be aware that play has this meaning and respect the child's learning.

I am sitting under the pepper tree, watching Brian run cars along the redwood two-by-four. I hear from across the yard, "I want my bottle, I want my bottle." Carrie slowly wanders to my side, a vacant look in her eyes, her sing-song, sad voice saying over and over, "I want my bottle." I scoop her into my lap, my arms, chest, and belly feeling the tight, hard little knot that recoils from me. Carrie pushes me away and then looks up into my face with red-rimmed eyes. "Mary Jane, I want my bottle." Her lips curl out and she sobs, then leans her head against me. For what seems like the twentieth time today, I say to Carrie, "I know you want your bottle and it is all right to cry for it. I'll hold you and listen to you."

In the four months I have known Carrie, she has always had her bottle in her mouth or nearby. Yesterday her mother decided she was too old for bottles and took them away. Carrie is quiet and tight in my lap. I rock her a bit. Then I start, "Once upon a time there was a tiny, tiny baby girl named Carrie--just this big." I make a little ball with my hand and Carrie looks. "This little girl lived in a very soft, warm place inside her mother's belly. Little baby Carrie could feel her mother's softness in her hands." I take Carrie's hand in mine and experience the softness between our hands. "Little baby Carrie could feel the softness of her mother in her face," I say. Slowly I touch Carrie's face and head, enjoying the lush skin and tiny features, the soft hair in tight pony tails. I touch Carrie all over her body as I tell the baby story. The little tight lump begins to soften. Then I can feel a blend-connection between us.

I sing to Carrie, Twinkle Twinkle Little Star, over and over. Then, Row Row Your Boat. Carrie listens. I can feel her listening, being comforted, being fed. We are playing a story game, we are touching, we are soft. Carrie's grief for her bottle is gone for the moment. The first stage of life is to be fed by mother, and Carrie's not finished yet with her nurturing needs. The story simulates the feeding. The body closeness relaxes the tight fear which would cause rejection. Carrie can be fed. The issue of this play is comfort and an earlier stage of life revisited.

"This just won't do!" is the consensus of the mothers' discussion about the hitting, throwing, and biting that were going on in the Infant-Toddler yard at Pacific Oaks early last November. I remember well being a mother of infants myself. I also remember similar anger that caused me to wash out my two-year-old Charlotte's mouth with soap after she had bitten my baby Matt, age one. That was twenty years ago.

"Assertion??!!" Heather's voice bounced back to me. I had just calmly described Daniel's biting Kevin as assertion. I know Heather's feeling about having another child hurt her little one. And yet I was standing right there beside Daniel and Kevin as they blew great foamy colored bubbles through straws, two little heads in one dishpan, hands catching bubbles. Then Daniel just took a bite out of Kevin--instead of blowing in his straw. Just another mouth play was what I saw.

This is the movement from "oral-in" to "oral-aggressive" for age two--classic Freudian theory. I want Daniel to bite a big red apple, not Kevin. I want the two-year-olds to be assertive, to feel the surge of power, to hit and throw. I carry my pile of old newspapers, my tape and string to the Infant-Toddler yard. Almost like snowballs, I think, as I prepare a pile of paper balls, hanging some in the tree. I make paper swords out of rolled newspaper. Patrick runs in to see what I'm up to. I shower him with paper balls. He is into the fun, throwing, tearing, hitting. All morning I play the paper assertion game as the troop of two's roam the yard, as is their nature, spending a bit of time here, then on to the next discovery. This issue of assertion in the child calls for a game of its own, to be available for experience in this stage of growth.

A favorite game of the one's and two's has to do with the effect gravity has on liquid in bottles and in glasses. I fill my six little pitchers with different colored water and carry them to the group feeding table. The group moves in. By the time I have the bottles and glasses on the table, six little hands have claimed a pitcher. "My turn," says Mikey. Brett's eyes sparkle with glee, a grin on his face as he pours a little water in each of three glasses and then stacks them. Tracy fills a bottle to the top and then works with putting on the nipple. Glen carries the pitcher over to the nearest creeping baby and gives her a shower. In five minutes the water is gone; Alicia and Bethany, our toddling ones, are patting puddles and watching the water drip over the edge of the table. The pitchers and cups and bottles go back to the shelf until tomorrow.

Each child has his or her own process of learning about water, drinking and pouring each day. The issue of the day reflects the mood, the developmental stage, the talent of each child. Brett, at twenty months, not yet weaned from the bottle, is structuring the activity in such a way that I see his future very possibly as a chemist!

Dillon walks into the room with his blanket, eyes and face turned away. He goes

to his spot in Cathy's room to play. Blocks and puzzles available, he's stacking and touching. He hopes that Priscilla will sit and touch toys with him. Dillon wants this structure in his play--the same place, same toys, the same person. Dillon forms his play in a ritual that supports him in his insecurity. The only time he feels safe to do something different is when Mark has come to play or there are bubbles.

Freeing Ourselves to Play

Bubbles and windy days and wild flowers in our field are free, wild times. Brian is lying on his back, feet and arms waving with the swishing pepper tree limbs, leaves. Tania, not yet one, is lying on my belly, face up to the tree dance, softly cooing while we flow with the wind. Carol's face is flushed, her eyes soft, her arms full of blue and yellow wild flowers. Andy and Jean run along at her side. They come to the door all aglow with the freedom that running with the child in and beside you gives.

"Suffer the little children to come unto me, for such is the kingdom of heaven," runs through my mind as I look into the big, blue eyes and pink face of a nine-month-old infant, smiling at me over her mother's shoulder in church. I smile back and make a little funny face. The baby jumps in her mother's arms and squeals. Six heads turn and frown at both of us. The mother nervously jiggles her child, cuddling her into a sleep position. Baby laughs out loud and babbles a bit. The father whispers in the mother's ear. She gathers her large diaper bag and moves out of the pew with the baby gurgling and people frowning all the way to the door. They both leave. The voice from up front is saying something about the goodness of living in the Christian community. We need to harmonize with playfulness during the church ritual rather than exclude mothers and babies.

I didn't go to church much when my children were babies, and when I did I usually ended up in the bathroom. Bathrooms in my imaginary world would be places to play and would definitely be equipped with a chair. I can imagine saying to a one-year-old, "Take your diaper off and go play in the bathroom. I will come in and sit in my chair and watch you splash in the water and investigate the plumbing and your body."

The three-year-olds that use our day care bathroom often play there. The bathroom is right next to my infant room, so I hear the fun going on. I also know the fun stops when any adult is present. With work on their faces, the adults wipe and dry panties and bottoms and puddles. The messages I often hear adults give in bathrooms are, "It is time for you to perform. Don't spill any water. Don't take too long. Don't turn on the water full blast. Don't laugh in the bathroom." There is no chair in the room for an adult to enjoy the play.

I think playfulness would be a great addition to bathrooms. I remember taking children to bathrooms in a nursery school to play. But the bathroom itself was formidable. The fan alone would scare the bravest of children. This bathroom had big toilets and doors on the cubicles and tall sinks. The children did manage to make a game of crawling under the cubicles. Children are great.

Another place that we regularly practice saying "don't" to our children is the supermarket. I wonder how it looks to fifteen-month-old Jenny or two-year-old Brian in the shopping cart going by literally thousands of different colored and shaped containers as well as the fruit and vegetable counters. The child watches as the parent picks items from the shelf. A round orange and red can, all decorated with curly lines. Into the cart it goes; such an automatic impulse to reach for and touch gets the frown from the adult. I think of infant stimulation. No program could match our supermarkets for a variety of learning environments.

My first memory of being in a store was the corner drugstore near my grandparents' house. I remember the feeling of turning the tall stool. My grandfather would talk to the druggist and I would spin 'round and 'round, smelling the aromatic mixture in the air, waiting for my purple ice cream cone. Seeing shelves of boxes and bottles--very exciting.

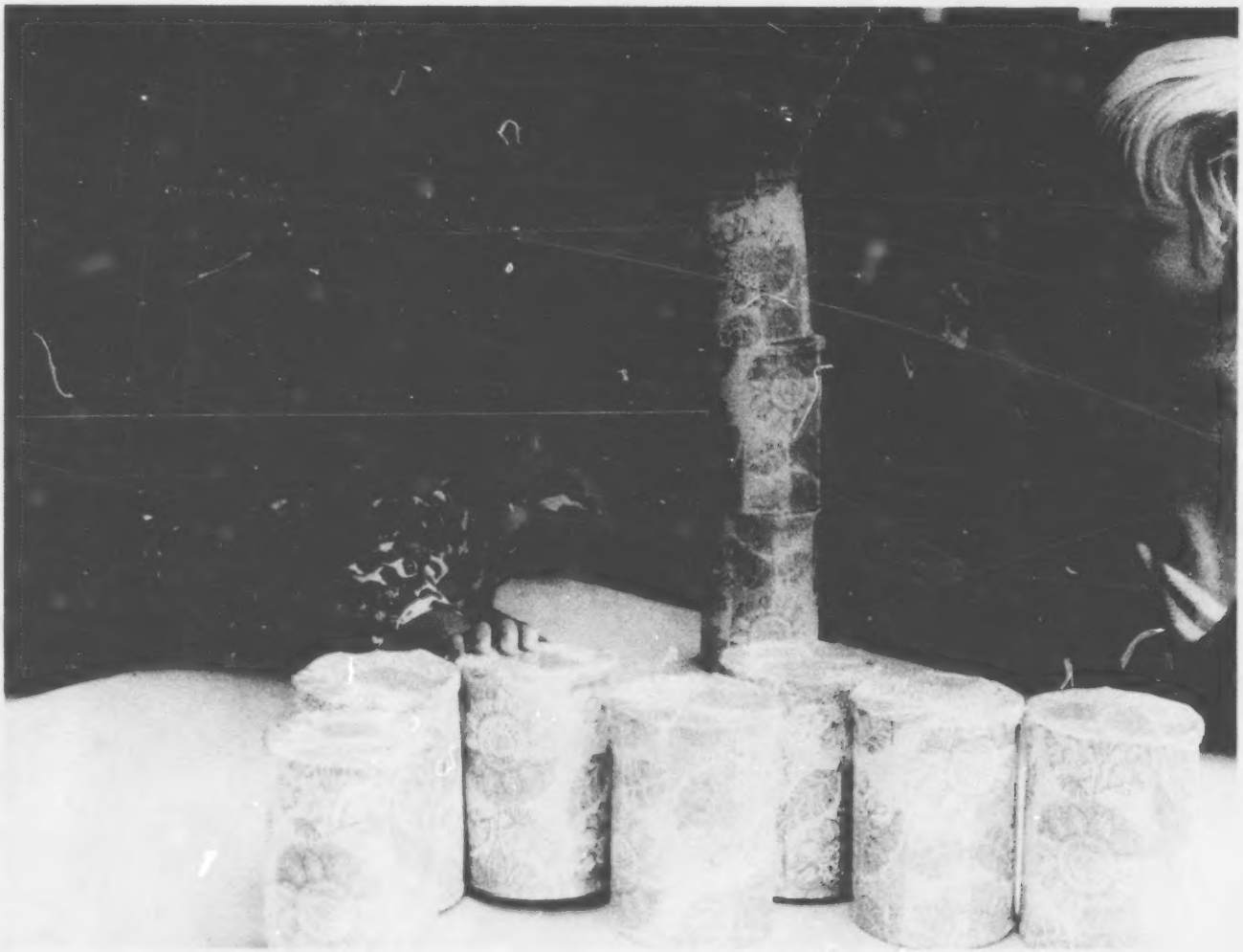
In today's modern supermarket, one of the most common adult-child relationship problems is the tantrum. This often occurs when we do not let the child respond. Week after week of shopping we teach the infant to dull the response of stimulation. "Don't touch the lettuce!" "No, you can't crawl in those cold shelves with the cheese." Then, when the child gets to first grade he or she is expected to turn responsiveness back on and learn to read. At that time parents are willing to playfully help children respond. I can imagine the many touch, taste, smell, hold, and drop games we all could make up to play in the supermarket if we felt playful inside.

I hear the parents of my infant students say to me, "Well, you can feel playful--you spend twenty-four hours a week with the babies. I spend twenty-four hours a day. I'm too tired to feel playful." And the parents are right. No one can do any activity twenty-four hours a day for seven days a week.

Babies and children and parents need babysitters who can lend support in the child-rearing process. And adults who have no children in their family need to have a child friend who will support their playfulness. My stereotyped image of the babysitter is

a fifteen-year-old person who wants to earn money and has no idea that children are persons too. The babysitter is to get the child to act nice by some means of control until the parent returns. Control is what matters in child care, as in the teenagers' own school experience; no one encourages them to be playful.

Naturally parents who have been babysitters like this themselves don't want to leave their children with anyone. And so we continue a pattern of separation between the young adults who will be our next parents and the children in their neighborhood. But wouldn't it be nice to hear one fifteen-year-old say to another, "I had a fantastic weekend, playing with three-year-old Jenny. We ran in the fields and picked flowers, made mud pies and sand castles!"



OBSERVING THE SOCIAL BEHAVIOR OF TODDLERS

Nancy Jambor

When I arrived at Pacific Oaks, one of the main things I wanted to do was work in the infant-toddler program. This age group holds a special attraction for me. I just like the little critters; they make me laugh and feel optimistic.

During the course of my work in the program, I began to feel a strong need to be able to record systematically my observations of the children's behavior. There was so much subtlety in what they were engaged in, so much vigor and change in their whole manner of being. I saw a kaleidoscope of persistence, imaginativeness, and tremendous growth reflected in the ways they played. The long staff discussions we had about children were fascinating and worthwhile, but I had come to the College with a firmly entrenched prejudice in favor of traditional scientific methods, and it seemed to me that we did not really know enough about what was going on under our noses. I wanted a way to make concrete and succinct information out of the intuitive, impressionistic statements we were all making about the children. I hoped to incorporate in one method two seemingly irreconcilable qualities: 1) clean, easily understood data of sufficient hardness to be convincing support for any general statements I might want to make about the behavior of wee ones, and 2) preservation of the liveliness, passion, and humor which are intrinsic, for me, to the experience of watching children.

I went through a long process of trying to develop such a method, drawing on others' approaches to observation but relying a great deal on my own trial-and-error process. My final plan was to use both anecdotal notes and behavioral coding, and to present the findings in both narrative and quantitative form. In this study I chose to emphasize the social aspects of children's behavior in a group day care setting.

Study Design

Subjects

The group of children studied ranged in age from five to nineteen months and consisted of five females and six males. The age distribution by sex was as follows:

	Males	Females
	19 months	14 months
(twins)	17	8
(twins)	17	7
	16	6
	9	5
	9	

All the children were enrolled for full-time day care at Fruit and Flower Day Nursery in Portland, Oregon. The six oldest children had been in a group together for approximately a year at the time of the study.

This group of children represented a cross-section of the community in terms of socioeconomic and ethnic backgrounds. Seven children came from two-parent families, four from single-parent families. Three of the eleven children were from ethnic minorities. Day care fees at Fruit and Flower are assessed on a sliding scale; the fees paid by the parents of this group of children were distributed all along the scale.

Procedures

The observation site was visited in the morning, between 8:30 and 10:30 a.m., on Mondays, Wednesdays, and Fridays. Occasionally observations were made on three to five consecutive days. A total of twenty-seven and one-half hours of observation were made.

Individual children were observed while they were in a free play situation, with a variety of toys, other children, and caretakers accessible. Occasionally observations were recorded while children were in other situations: playing outdoors, sitting in high chairs while eating, being diapered. On an average, each child was observed twice a week, for a total of fifteen minutes per child per observation. All subjects were designated by circled numbers and referred to by their numbers in the observation.

During the fifteen-minute observation period, behavior was continuously recorded in the sequence in which it occurred, using the following system of symbols:

Behaviors

T	throw	□	adult (caretaker)
H	hit	▪▪	novel adult
To	touch	(N)	child (N = child's number)
∧∧	vocalize	(▪▪)	novel child
I	imitate	Ob	observer
▲	gross motor movement	⬭	bottle or food
⇢	an intervention	△	toy
→	direction of behavior		

A combination of symbols was used to describe complex behaviors or sequences of behavior. For example, if Child 1 handed a toy to Child 8, that observation would be recorded symbolically as:

(1) → △ → (8).

In this way, interactions between children could be readily recorded, with participants, objects, and movements specified.

Quantitative Findings

Frequency Measures

One of the ways in which the observations were quantified was by tallying the frequency of a behavior, that is, the number of times it occurred during a specific block of time. I used minutes as the unit of time. For every behavioral category I obtained a frequency measure (f) by totaling the recorded instances of a behavior and dividing that number by the total length of the observation. For example, Child 6 vocalized a total of 167 times during the course of 89 minutes of observation. Dividing 167 by 89 (behavioral occurrences/time), a frequency measure of 1.88 vocalizations per minute is obtained.

This calculation allowed me to compare the categories of behavior (laughing versus hitting versus vocalizing, and so forth) in terms of how often they occurred. Table 1 shows the frequency measures calculated for all observed behaviors.

Table 1: Frequency of Occurrences of Behaviors (behaviors/minute)

Subjects			f Non-Social Behaviors					f Social Behaviors					
No.	Sex	Age (mo.)	Throw	Hit	Toy	Bottle	Gross motor	Vocalize	Peer look	Adult look	Laugh	Touch	Imitate
(7)	F	5	0	.13	.70	.15	.75	.39	.92	.73	.12	.07	0
(10)	F	7	.03	0	.72	.70	1.68	1.60	1.90	.88	0	0	0
(4)	F	8	.03	.05	.96	.14	1.15	.92	.95	.66	.26	.33	0
(8)	M	9	0	.02	.88	.13	1.55	.80	.97	.48	.16	.12	0
(9)	M	9	0	.40	.76	.18	1.54	1.04	.87	1.32	.04	.13	0
(5)	F	14	.11	.05	.59	.36	1.02	1.62	1.15	.96	.13	.12	0
(6)	M	16	.12	.08	.45	.46	1.76	1.88	1.28	1.07	.22	.11	.13
(3)	M	17	.03	.05	.39	.50	1.08	.78	.84	.76	.08	.01	.01
(2)	M	17	.05	.13	1.28	.54	1.54	.85	1.04	.78	.10	.07	0
(1)	M	19	.10	.21	.55	.64	1.40	.69	1.20	.76	.13	.05	.05
Mean Frequency			.04	.10	.73	.35	1.22	.96	1.01	.76	.11	.10	.02

Of the behaviors grouped as "non-social," the most frequently occurring is gross-motor movements. This is not surprising, given that this area is characterized by striking growth and development during the first two years of life. Of the "social" behaviors, verbalization, looking at peers, and looking at adults are all activities which occur fairly frequently, averaging close to once a minute. In this group setting, children look at peers more often than they look at adults. The frequencies for the other three social categories are very low.

In only two categories was there a statistically significant correlation between the frequency of the behavior and the age of the child. Two non-social behaviors--throwing and drinking from a bottle--showed a tendency to increase with age. So did two social behaviors--looking at peers and imitation--at a level approaching significance. In other categories, individual differences were more evident than differences by age.

Sociograms

The second way I dealt with the quantitative data was by use of a diagrammatic technique employed to represent social interactions in a group: the sociogram. Construction of the sociogram involves tracking interactions between subjects and representing the direction and strength of exchanges with arrows and appropriately shaded lines. Sociograms were prepared for each of the social behavior categories. Three are shown on the following three pages.

A cursory look at the sociograms, side by side, readily reveals that adult caregivers are the recipients of the bulk of the children's initiated behavior. In only one category--hitting--is this trend reversed; the adult was hit only once, and then by the youngest child. It is primarily the older children who hit each other and who imitate each other.

The interchange of vocalizations (Figure 1) appears more evenly distributed among the children. However, in only a few instances is this a reciprocated behavior; that is, children do not seem to vocalize back and forth. Subject 1, the oldest child, received an abundance of vocalizations from the next three oldest children, Subjects 2, 6, and 5. Subject 1 vocalized only to Subject 5 and to the adult.

Touching (Figure 2) occurred between Subjects 4 and 2, but most of it was initiated by Subject 2 (these are Jennifer and Ian; see page 71). Subject 4 also touched Subject 8 (James) a good deal, with a small amount of reciprocation on his part. It is interesting to note that touching behavior includes every child, with some of the older children touching younger children quite a bit (see Subject 1 to Subject 7; Subject 5 to Subject 11). In contrast, hitting behavior excludes the younger ones altogether.

Smiling and laughing (Figure 3) is directed predominantly toward the adult and toward Subject 1, the oldest child. There is some reciprocity in the direction of this behavior, and the strength of the interchanges appears fairly equal (e.g., Subject 1 smiled or laughed to Subject 5 a total of 4 times; Subject 5 smiled or laughed 3 times to Subject 1).

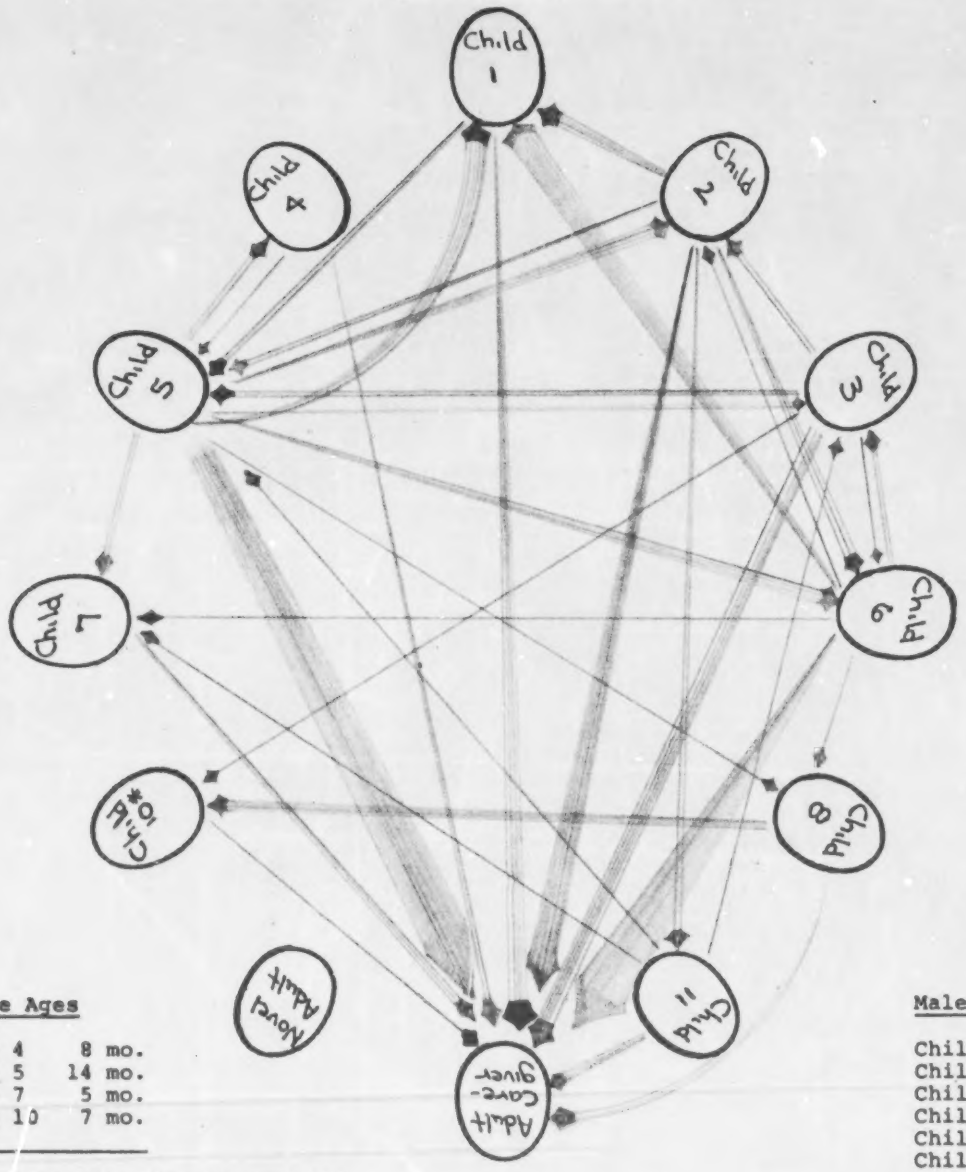
The data in the sociograms suggest that the children discriminate each other's relative age and direct their interactions accordingly, particularly with respect to hitting and imitating. The younger children were rarely hit. Is this because they were younger, in the view of the other children, or because they were not involved in hitting? Is hitting a reciprocal behavior? (Hit me, and I'll hit you back.) Seeking answers to these kinds of questions is good incentive for continuing to record observations.

General Observations

Crawling or toddling children in a group setting seem to spend as much time paying attention to each other as they do exploring the physical environment, manipulating toys, etc. While a good deal of this behavior is non-reciprocal, the social interactions occurred more frequently than I had expected on the basis of the age-based descriptions of social development made by some theorists (Piaget, Stone and Church, Gesell).

Children under the age of two are considered to be unaware of each other as people, distinct from objects (Piaget, 1968; 1972). They are described as engaging only in solitary or parallel play (Stone and Church, 1975). As a corollary, children of this age are said to be incapable of cooperating with each other to accomplish a task or complete an activity (Stone and Church, 1975; Gesell and Ilg, 1943). I observed behavior in this group of children, ranging in age between five and nineteen months, which I believe contradicts each of these generalizations. I found children making efforts, some of them successful, to comfort each other and forming special attachments with one another. In recognizing another's needs and responding in an appropriate manner, and in selecting out particular people as "special," children appeared to be showing the beginnings of an ability to view others as separate from themselves.

Figure 1: Sociogram for Vocalization Behavior



Female Ages

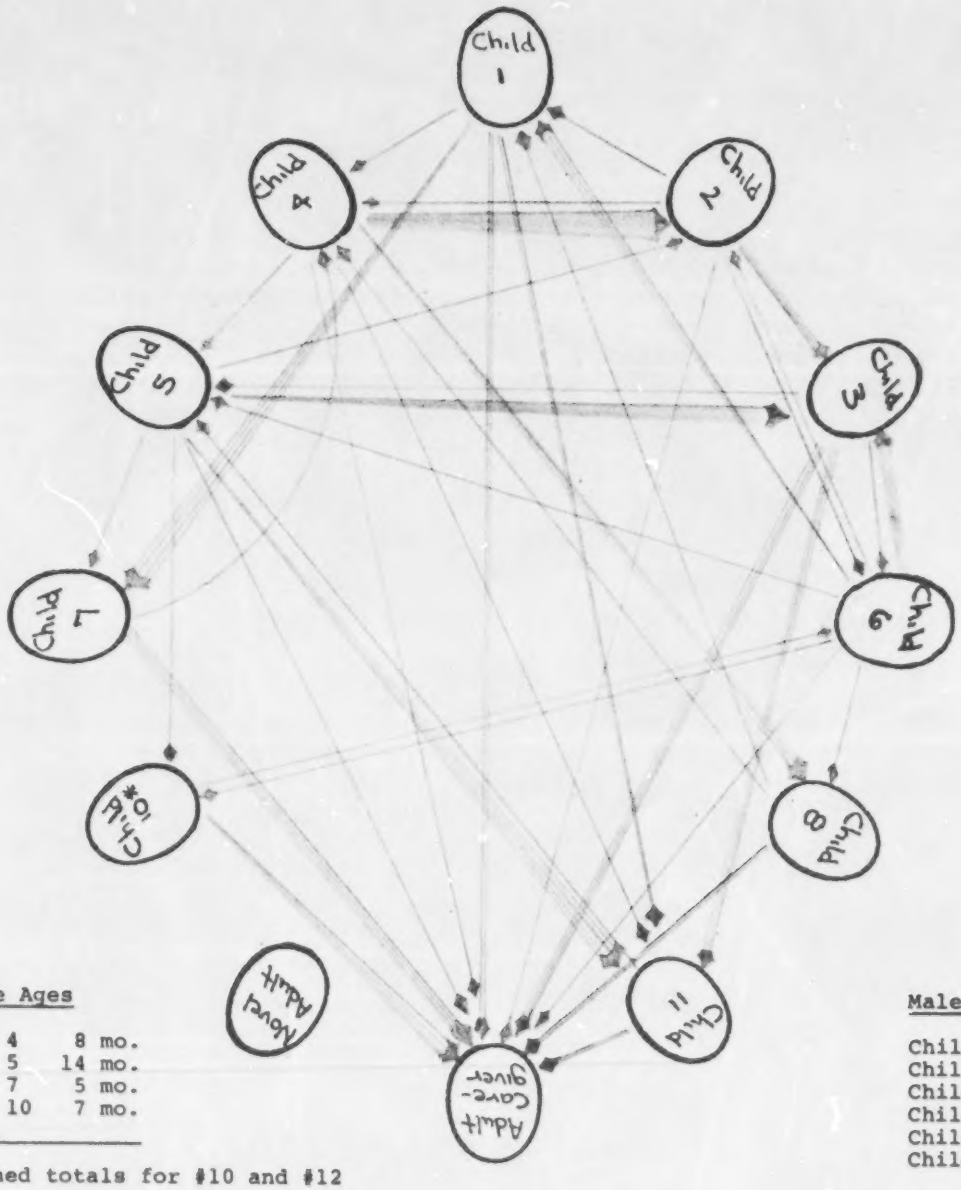
Child 4	8 mo.
Child 5	14 mo.
Child 7	5 mo.
*Child 10	7 mo.

*combined totals for #10 and #12

Male Ages

Child 1	19 mo.
Child 2	17 mo.
Child 3	17 mo.
Child 6	16 mo.
Child 8	9 mo.
Child 11	9 mo.

Figure 2: Sociogram for Touching Behavior



Female Ages

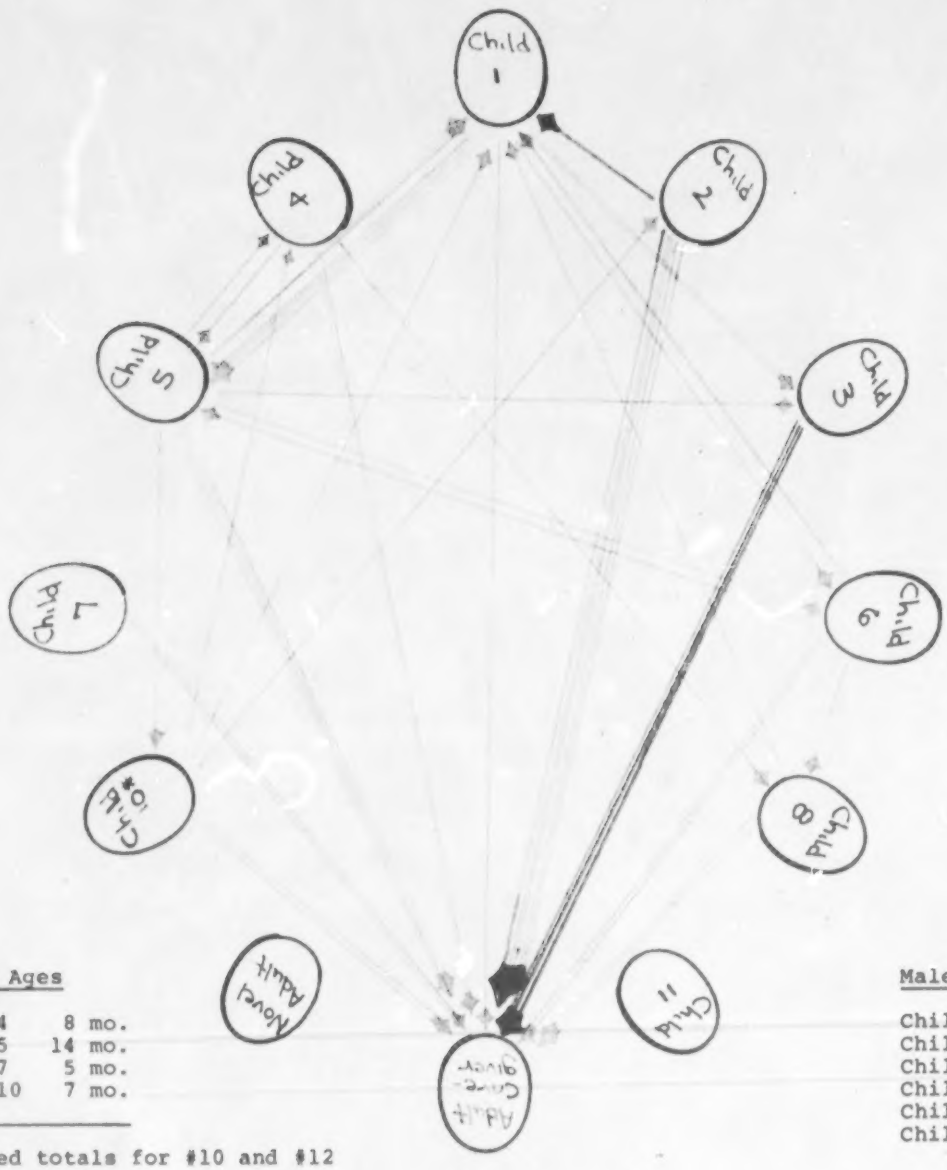
Child 4	8 mo.
Child 5	14 mo.
Child 7	5 mo.
*Child 10	7 mo.

*combined totals for #10 and #12

Male Ages

Child 1	19 mo.
Child 2	17 mo.
Child 3	17 mo.
Child 6	16 mo.
Child 8	9 mo.
Child 11	9 mo.

Figure 3: Sociogram for Smiling and Laughing Behavior



Female Ages

Child 4	8 mo.
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Child 7	5 mo.
*Child 10	7 mo.

*combined totals for #10 and #12

Male Ages

Child 1	19 mo.
Child 2	17 mo.
Child 3	17 mo.
Child 6	16 mo.
Child 8	9 mo.
Child 11	9 mo.

Comforting

When a child was crying after a fall or some other catastrophe, other children frequently stopped what they were doing and approached the distressed child. In a variety of ways they would try to comfort their crying comrade: patting her head, laying their head on top of hers, opening their mouth wide and laying it against her head, embracing her, and sometimes bringing the child's bottle to her, going as far as inserting it into her mouth. Very rarely did anyone try to force the bottle into someone's mouth; rather, it was offered in front of the child's face, and only when the child opened her own mouth would the comforter push the nipple in and release the bottle.

December 14

Tim is standing in the middle of the room crying (reason unknown to observer). All adult caregivers are engaged and unavailable to Tim. Mohammed comes up to him, puts his arms around Tim's shoulders, and pats Tim with his fingers. This continues for ten to fifteen seconds. Mohammed steps away, peers into Tim's face, and then hugs him again. Tim, meanwhile, quiets down but does not assume a fully relaxed body posture. His arms are pressed up against the sides of his body, and his mouth is compressed into a thin line.

After Mohammed breaks off the second hug, he looks again at Tim, nods his head, and says, "O.K.?" The combination of nodding his head (as though Tim were indeed fine once again) yet questioning Tim impresses me as an effort to help Tim "buck up" and move on to another activity besides crying. Mohammed then trots away. Shortly afterwards, Tim also moves off to play again on his own.

Special Relationships

I observed that special friendships developed among some of the children and that these individuals responded differentially to each other. The friendships remained stable over time (nine months of observation in the case of Jennifer, James, and Ian), although the children did not always express the same level of involvement with one another. There were also pairs of children who did not get along with each other; they did not interact very much or tended to pester each other.

Jennifer was particularly attached to James and Ian and demonstrated her preference by being overtly affectionate on various occasions. When Ian began leaving the classroom to join an older group of children, Jenny would bid him farewell with hugs and kisses. She continues to be delighted to see Ian, although his visits are quite infrequent. Ian used to respond by hugging and kissing Jenny, but increasingly his stance has become one of willing submission to her affection rather than active participation.

James will sometimes flee Jennifer's advances for a week or two; sometimes he stands his ground, warding her off with a loud "No!" and an aggressively raised arm. Then again, he will seek her out as she sits in the privacy of a tent and sit chortling at her, rolling his body against hers, and generally inviting physical contact with her.

Robbie and Tim have also formed a close bond, seeking each other out at the start of the day, inevitably to ride bikes together around and around the room, laughing and making frequent eye contact. Robbie, when he has arrived at school before Tim, often approaches Tim as he arrives, with a second bike in tow. He pats the seat of the bike and says, "Tim ride it." Tim then rushes to the bike and they're off.

Tim engages Steven in games of tag in which no one is clearly the chased or the chaser. Tim simply begins the game by running away from Steven after establishing "impish" eye contact: Tim narrows his eyes, and his gaze slides over his shoulder until he sees that Steven has noticed him. He holds Steven's eyes for a moment, expressionlessly, then slowly grins, and often giggles. Steven also breaks into a broad grin, and then they are both running, following the same pattern of movement around the room, until one falls down or turns back on himself to "chase" in the opposite direction.

Social Play

Stone and Church (1975) have described play in early childhood in terms of four categories: solitary, parallel, associative, and cooperative. In this scheme, the type of play in which children engage is determined to a significant extent by age. Discussing the emergence of social play, Stone and Church state categorically that "At first, there is no play with peers" (p. 237). According to these theorists, this initial period extends for two and a half years. Children whose play is characterized as being solitary or parallel are not considered to be involved with other children. Stone and Church contend that:

two or more children playing side by side, obviously taking pleasure in each other's companionship, (do so) *without any* <u>*real exchange*</u>*, unless it be a grim, silent tug-of-war for some coveted plaything.* (p. 237; my emphasis)

Further, children who are beginning to play "associatively" continue to have minimal "real" contact with their peers. Thus, the interactions of infants and toddlers are not considered social until the children are cooperating with each other in their play (sometime around age three).

Play situations which I observed reflected the extent to which these toddlers interacted socially. I observed the children calculating the dramatic effects of their playful antics on each other:

<u>*July 12*</u>

Ian is in a crib separated from the eating area by a hanging bedspread. Ian pulls the bedspread to one side and peeks around the corner of it at Justine and Scott. He looks at them, smiles and laughs, and then disappears. He reappears and repeats the smile and laugh. Justine and Scott, in high chairs, laugh too.

<u>*November 28*</u>

Ian and Justine are sitting in the rocking boat facing each other, not rocking. Justine has brought her bottle to the boat. Ian takes it from her. Justine reaches out her hand and vocalizes to Ian, "Bah, b[illegible]" Ian smiles slightly (around his thumb, which he is sucking) and tucks the bottle under his arm, keeping his free thumb and index finger on the nipple, rubbing them over the tip of it. Justine screams but remains sitting. The caregiver intervenes, telling Ian that he must give the bottle back to Justine and assisting him in doing so. Justine grabs the bottle in both hands, grins and laughs while looking at Ian, and hands the bottle back to him. Ian laughs again and hugs the bottle to his chest.

I observed them imitating each other's behavior:

<u>*July 10*</u>

All the children at the table have the push-together beads poking out of their mouths.

9:42 *Ian taps a bead on the table, vocalizing: "ee-ee-ee-ee-yee." The adult responds to this vocalization with "Uh-huh." Ethan looks at the adult, then taps a bead on the table and vocalizes in a manner similar to Ian's.*

9:44 *Justine stands on the bench next to the table and waves both her arms rapidly up and down. Ian looks at Justine, looks at the adult, then waves his arms rapidly up and down but for a briefer length of time. Chelsea (in a high chair across the room) waves her arms.*

9:51 *Scott pounds a bead on the table and screams. Ian pounds a bead and vocalizes (not screaming). Ethan joins in the pounding but does not vocalize.*

<u>*September 1*</u>

Ian and Ethan are riding small wheel toys around the room, remaining next to each other. Ian lifts his bike onto a couch/bed and then climbs onto the bed and onto the bike. An adult intervenes, first verbally, then physically, to remove bike and boy from the couch. Ethan lifts his bike onto the bed. The adult intervenes again. Ian continues to lift his bike up onto the couch but does not resist the adult's limit-setting in any vocal or physical way, i.e., the behavior continues but Ian indicates no frustration when his efforts are consistently thwarted.

Later, Ian puts the front wheels of the bike on an overturned box. Then he pulls the bike back off the box and rides on. Ethan then rides over and puts the front wheels of his bike on the same box.

October 15

A large cardboard packing box is brought into the room and left upright on the linoleum-surfaced area. Immediately most of the children gather around the box, holding onto its corners and sides. Through the group's efforts the box is pushed around the room. After a few minutes the box is pushed over onto its side. The children on the "down" side move out of the way before the box is tipped, without any words from other children or adults.

Once the box is on its side the children once more group themselves around it. They begin pounding on it with open palms, chanting, "Dum ditty, dum ditty, dum dum dum," which is a repeating line in the story book, Hand, Hand, Fingers, Thumb, in which many monkeys drum on drums. During the drumming many of the children are also vocalizing, loudly and laughingly.

After several minutes of drumming a couple of the children begin climbing on top of the box, running up to the raised end (the open end of the box has collapsed, so the top surface now forms a ramp/slide). They are assisted in jumping off the box onto the floor by an adult. Several of the children want to do this repeatedly.

Next, one of the children climbs up the ramp, turns around and slides down to the floor. Soon other children are also using the box as a slide. When there is more than one child on the box at a time, children begin "forfeiting" the run up the ramp; instead they climb up over the raised end of the box and then slide down.

January 25

After naptime Scott is riding an "Explorer" bike down the hall, lying on his belly and extending his legs behind him. He is riding very fast with an open-mouthed expression of pleasure on his face. He rides about half the length of the hall without coming to a stop.

Immediately afterwards Justine tries to imitate Scott's performance. She takes a similar bike and, holding onto the steering wheel, tries to push the bike forward while also trying to lie down on the seat of the bike as Scott has done. She is unsuccessful at throwing her torso onto the bike, and so she simply approximates Scott's behavior, stretching her body over the bike as she pushes it, but not resting her weight on it. She smiles and seems pleased with her effort.

A few minutes later Scott whizzes by again; he ends his ride by deliberately crashing into the wall. Justine watches, laughs when Scott, also laughing, crashes, and then imitates him. She backs her bike away from the wall, then pushes forward and bumps into the wall. The effect is much less dramatic than Scott's crash, but Justine smiles and laughs at Scott after her "crash."

I also observed children collaborating on projects:

December 14

After lunch as everyone is being readied for naptime, Robbie goes over to the child-sized rocking chair and begins pushing it around. Eventually he tips it over onto the arm-rests, so the runners stick out like wheelbarrow handles. He grasps the two ends and begins pushing the chair across the room.

William joins him, grabbing the chair on the opposite side. Robbie pushes and Will pulls the chair the length of the room.

Near the door Chelsea is standing, unoccupied. She seems to be casually watching them, not evincing any particular interest in their endeavor. As they push the chair past her, they pause, and Robbie says, waving one hand at her, "Bye-bye." Then Robbie and Will continue pushing the chair.

January 2

After lunch Ian and Ethan begin lining chairs up, side by side (though not all facing the same direction) on the rug. After lining up approximately ten chairs in this manner, they go to one end, climb on top of the first chair and walk the

length of their construction. After they do this several times Will joins them, laughing and smiling as he walks from chair to chair down the row.

Ian and Ethan move off, Ian to be diapered and Ethan to the slide. Justine begins the circuit, starting at the same end as have the others and walking the full length of the line of chairs. She does this several times, pausing in the middle of the row to look around, vocalize, and laugh.

The one difficult moment during construction came when Ian and Ethan arrived simultaneously at the growing row of chairs, each with a chair to add. Ethan tried to force his chair into the line any which way. Ian began to cry and visually sought an adult, who came and helped Ethan line up his chair so that Ian could then place his next in line. Neither Ian nor Ethan was observed vocalizing to the other at any point during the entire episode.

In all of these instances the children communicated with each other (although not in standard English), paid heed to each other's reactions, and modulated their own behavior accordingly. On occasion this group of children, all under two years of age, behaved in ways indicative of "real social exchange," according to my criteria. Certainly they lacked many social skills, and their advances to each other were not always reciprocated. Adult intervention was often needed. But they were trying, and they sometimes succeeded.

When children were grouped together around an activity, imitation of vocalizations or of gross-motor behavior was especially frequent. Games of some sort were often initiated; that is, one or more children would begin a playful sequence of activity which involved other children directly.

Eating times were frequently occasions for imitative play. Once when several of the children were seated in a semicircle eating a snack, one child began shaking his head rapidly from side to side. He did this for a short time, perhaps five seconds, then stopped and laughed as he looked at the other children. Others joined in, smiling or laughing as they shook their heads. Then they would all pause and eat more food. Shortly, someone else would begin the sequence of head-shaking anew, doing a solo performance and seeming to take great delight in it. Again, after a pause, others would join in.

More recently (when many of the children were about twenty months of age) adult behaviors have been imitated more directly. In particular, the children have learned to perform their own versions of songs and fingerplays. One afternoon Ian, Ethan, and David climbed onto the couch and began jumping up and down, shouting "Mimis! Mimis!" which is their way of saying "monkey." They jumped for a long time and repeated some of the words of the fingerplay, "Monkeys jumping on a bed." It seemed clear to me that they were acting out the song they had heard us do for them several times. In between jumping, they would deliberately fall down, accomplishing this feat with great glee and laughing.

After a period of time, David left the couch, and then Ian and Ethan changed the game. (I had, in the recent past, played at blasting Ian's belly during diaper changes. This game entails discharging a blast of air near his bare belly, which makes a lot of noise and tickles.) Ian began pulling Ethan's shirt up above his belly, then leaned over his belly, pursing his lips and trying to make the sound of a belly blast. Because he could not balance himself well enough, Ian never got his mouth on Ethan's skin, but he continued trying (and Ethan made no protest) for quite a while. Finally, Ian seemed to give up on Ethan's belly, and instead lifted his own shirt and leaned over to reach his own belly. Rather than pursing his lips and pushing air through them, he now began spitting on himself, apparently trying a different tack in order to accomplish his objective.

Discussion

Peer Interaction in Day Care

Studies of infant communication (Fraiberg, 1977; Lewis, 1978; Rothbart, 1978; Uzgiris, 1979) have focused primarily on communication between children and their adult caregivers. I would suggest that other children, where they are present, also function as partners in communication, eliciting responses and reactions and stimulating each other's knowledge and awareness of the world. My observations lead me to believe that peer interactions are significant in children's early development. The context for cognitive development is a complex web of interactions. No behavior is emitted full-blown, emerging without precedent. Children do not suddenly and spontaneously play cooperatively. Occasions of cooperative play reflect a history of learning about play, about cooperating, and about not-cooperating.

In my observations, much of what transpired between children was seemingly unnoticed

or unremarked upon by the caregiving adults. The caring behaviors which took place between children did not appear to be initiated by the adults. Rather, children appeared to be imitating the kind of caregiving they witnessed, with great frequency, on the part of adults. That the children initiated this level of caregiving with each other, without benefit of very much direct encouragement or reinforcement, raises questions about the way children learn in group settings and, perhaps more important, what they learn. The data presented in this paper suggest that very young children can and do learn from their peers a tremendous amount about the business of living and can sometimes behave in ways which have been considered the domain of older and wiser children.

An incidental observation not reflected in the data may shed further light on social learning in toddlerhood. Social facilitation is a concept derived from ethology (Condon, 1974) which works well to describe a characteristic of toddlers at play. It is used to describe congregating behavior in birds and beasts; in chicks, for example, pecking for food is induced by seeing another chick or hen pecking at rounded objects.

On many occasions I have observed toddlers "clustering" (Mueller and Rich, 1976) in analogous fashion around an activity. Crayons and paper laid on a table may be ignored for several minutes until one child (perhaps accompanied by an adult) takes an interest in them. Suddenly there will be many children around the table, all attempting to use the materials at once. Trying to pry children apart in such a situation can pose enormous problems for the adult, since the children seem strongly motivated to be grouped together, rather than to spread out so that materials may be more easily used. Having a number of activity centers available simultaneously is not always effective in distributing a population of toddlers. Alternatives to clustering tend to be ignored, until a splinter group forms around a new activity, and once again there is a mass exodus for that locale.

In a preschool setting, I observed a similar phenomenon among the youngest group of children (two and three years old), which seemed to dissipate as the year progressed. This change in the children's behavior may have reflected their developmental maturation. Alternatively, the children may have acclimated to an environment which constantly offered a number of choices. These preschoolers may have learned to make choices for themselves after making choices on the basis of everyone else's choice.

I did notice that the four- and five-year-old group formed more autonomous play groups, which moved from activity to activity as integral units. These groups seemed more independent of a particular activity as the impetus to be together. Conversely, younger children tended to group themselves around an activity, and disperse as the rest of the group dispersed (whether or not they had come to a stopping point as individuals).

Adult-Child Interaction in Day Care

Do young children in day care pay attention to their peers because these are, in fact, the most fascinating features of their environment, or simply because they are the most accessible? In a group of children, does the individual child get enough attention from the caring adult? Human babies are not usually born in litters (E. Robert LaCrosse, Jr., personal communication); the customary adult-child ratio in the earliest years of a child's life is one-to-one. As we make available in this society the option of group care for infants and toddlers, we radically alter this ratio. Does the opportunity for contact with peers, which an infant at home often misses, compensate for the likelihood of reduced attention from an adult? Does the "bombardment" experienced by an adult who spends her day with a group of toddlers reduce her resources for responding to individual children as they need?

I don't have answers to these questions, but I believe they should be raised. I do have some ideas, based on my observations and my own experience as a day care teacher, of some of the risks inherent in group care for the youngest children, and some suggestions for dealing with them.

The Use of Contraptions

In the midst of the demands of a group of young children, the adult caregiver may be tempted to regard the "good" baby as the one who makes the fewest demands. One way in which adults often attempt to keep infants contented is to place them in contraptions which allow for limited kinds of gross-motor movement. Bouncers, walkers, and infant seats are among the more common variations on this type of equipment. Because of their design, they restrict an infant's freedom of motion and thereby also curtail his capacity to make choices about his body (to roll over, to crawl, to lift his head, to reach for a toy).

I have observed that caregivers change their caregiving when they begin to rely on equipment to babysit a child. Having securely fastened a child into a seat, adults seem to feel that they have adequately dealt with that child's needs for a time, and they move off to cope with other areas of chaos. After a few minutes of sitting, bounc-

ing, or paddling around in a walker, the children I observed became somewhat passive; then they began to fuss, vocalizing and crying in what seemed to be efforts to gain adult attention. Often, an adult was unable to return to the "imprisoned" child for awhile, during which time the distressed quality of the cries became increasingly pronounced.

All too often, the sequence of events at this point led to a predictable type of interaction between adult and child. The child would quiet upon arrival of the adult. The adult would interact vocally with the child, cooing and talking; sometimes she would also begin simulating the motion of the equipment (bouncing the child or pushing the walker back and forth), possibly in an effort to reactivate the infant's interest in that form of stimulation. The child responded by relaxing somewhat, smiling and vocalizing back to the adult, who usually interpreted this response as sufficient amelioration of the previously uncomfortable situation. In fact, however, nothing had been done to change the dynamics of the situation for the child. When the adult moved off again, the child would again begin to fuss, perhaps reaching out his arms to the adult. Rather than reinvestigating the distress, the adult frequently assumed that the child was "simply" demanding more attention and that it would be unwise to give in to such a demand.

When I had the opportunity to do so, I removed children from such equipment, arranged a new, safe space for them, and placed some novel toys within reach. I was then able to remove myself from the situation, because the child was relaxed, was stimulated in a less rigid way, and was able to exercise control over her body.

On the Importance of Being an Observer

Many caregivers seem to lack skill as observers. One of the most important skills a caregiver/teacher can possess is a finely-tuned eye. The ability to see events and interpret them with accuracy is critical to "good" care, i.e., interactions between adults and children which are truly responsive to both immediate and long-term needs on the part of both the tall and the small. When a child cries, screams, vocalizes, laughs, the caregiver must make a split-second assessment of the situation, understand the dynamics of it, and from there be prepared to enter the situation as need be. Possessing the information to make decent guesses as to what is happening with a given individual or group so as to respond appropriately is important.

How we get the scoop is one issue. Equally important, I am discovering, as I work long days with a dozen twelve- to twenty-four-month-olds, is finding ways to sustain the energy necessary for implementing those appropriate responses. Often I am nearly overwhelmed by the fatigue and resultant confusion out of which adults attempt to be caregivers in a full-time day care setting.

One imaginative solution to this gap in information reception, as visualized by one of my systems-oriented friends, would entail arranging an observation booth, perhaps suspended from the ceiling to afford a 360-degree view, to be manned by trained observers. Front-line caregivers would be equipped with earphones and microphones (such as television engineers have) for two-way communication with the observers. The observers would be charged with collecting data of various sorts and analyzing ongoing situations so as to give appropriate instructions to the caregivers. It would work somewhat along these lines:

Caregiver 2: Child 7 has been signalling to have her position changed. Please remove her from the walker. We suggest a safe place on the floor, in a prone position, with a few manipulable toys within reach.

Caregiver 1: Child 3 seems to want a bottle. Try offering him one.

This makes for an interesting scenario, even if it is somewhat impractical.

A more relevant suggestion I would make is to train caregivers to be good observers, to develop in themselves strong intuitive faculties, and to make a habit of that extra bit of distance from the immediate situation which is implied by the word "observer." Once these skills are somewhat mastered, there is a need to cultivate a repertoire of caregiving behaviors, so that observing events can lead smoothly to assessment and appropriate responses. Unfortunately, I know of no wonderful way to become a good observer, much less to assist someone else in such an endeavor. Simply, painstakingly, it seems to take lots of looking, and reflective thinking and talking about what was seen.

Experimenting

Cultivation of a repertoire of caregiving behaviors requires experimentation. I perform experiments, using scientific method in a loose way, with great regularity when

I am with children, as a way of trying to answer my ongoing, incessant questions about their needs/wants. Imagine this scene: David is sitting on the floor, looking about without any specific focus (that I can discern), and vocalizing in a way which suggests discomfort to my ears. I see this situation and I wonder to myself, Hmm. I say, "What's your story, Dave?" Being a "mere" sixteen months old, David simply looks at me, ceasing his vocalization for a moment. A number of possibly related items flash in my mind: food, toy, clean diaper, cuddling.

My first choice, the pairing of a variable with the hypothesis (as yet unproven) that all is not well with David, is to offer him food. "David," I say cheerfully, "bah? Do you want a bottle?" Mind poised, I wait to collect the data, the responses David will make to my behavior which inform me as to whether the pairing has significance or not. David looks at me blankly; that is, he does not respond to my verbalization in any specifically differentiated manner. Being a careful scientist, and knowing that one variable involved in this particular experiment is that language may still be a major mystery of the universe to David, I cross-check these results. I go to the refrigerator, extract one of his bottles, and offer it to him. "Bah, David?" He takes the bottle, takes a swig, hurls it across the room, and bursts out crying. So ends the first experiment.

I move quickly to a second. A quick check of the contents of his pants brings me closer to an appropriate analysis. After changing his diaper, we again test the list of alternatives, with the following results: Yes, he wanted the bottle, but only after he was comfortably dry and clean. Sure, he says, a novel toy is jolly fun, and thank you, I will take a cuddle or two before moving off with the new plaything.

Conclusions: 1) Beware of assumptions which have not been tested. 2) Remember that variables are interrelated, and so cannot be categorically excluded from the experiment after only one trial; e.g., David did want food, but he needed a diaper change more urgently. 3) It is important to test several variables before concluding that all the experimental results are in, and that I, as caregiver, am then free to move on to other questions involving other children. There may well be a hierarchy of needs, all or most of which need to be addressed before the "problem" (in this instance, David's gloomy countenance) can be considered solved.

Summary

My observations suggest to me that commonly held views of the social incompetence of toddlers may not accurately describe young children in day care. The toddlers in this study, all under two, were seen to comfort each other, form special friendships, and engage in social play involving the invention of mutually appreciated games, imitation, and collaborative efforts to accomplish tasks. While adults received more direct input from children than did peers, children watched each other more than they watched adults. They clearly modeled some of their behavior toward other children on adult behavior toward children, and they took initiative in behaving in helpful and playful ways toward each other.

The discovery that children may be able to meet some of each other's needs does not, however, relieve adult caregivers from primary responsibility for creating and sustaining a responsive environment in which infants' and toddlers' needs can be predictably met. Young children are not predictable for each other; they are just beginning to learn social responses. At this very critical stage of development, children need appropriate response from adults. Through observation and experimentation, we can keep on learning how to provide it.

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SOURCES

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